

# Man In A Vice by GREGORY BENFORD

February 1974

ICD#08025

60c

75c in CANADA & FOREIGN COUNTRIES

**amazing** SCIENCE FICTION  
First in Science Fiction Since 1926

**FATHER** BY **PAMELA SARGENT**

A NEW SHORT NOVEL, COMPLETE IN THIS ISSUE!

also

No Deposit\* No Refill by **Robert F. Young** © Mama  
Loves You by **Dale Randles, Jr.** © Warship by **David**  
**Redd** © © © Annapolis Town by **Grant Carrington**



LICENSED TO UNZ.ORG  
ELECTRONIC REPRODUCTION PROHIBITED



# Behind Your Conscious Mind...

## Use these Extrasensory Powers

**WHY LIMIT YOURSELF TO FIVE SENSES?** Seeing, hearing, touching, smelling, and tasting reveal only a part of life and reality. There is a world of perception—of greater realization behind your outer self.

Impressions of these extrasensory powers occasionally arise in your conscious mind. The strange feeling of an impending danger—that intuitive flash or hunch with its forceful clarity—or receiving the thought of another before he has spoken it—these are telltale indications of your unused potentialities.

No longer are these something to just wonder about and not to discuss. They are not supernatural or weird, but natural

phenomena. To understand, develop, and direct them can transform your whole personality. They can provide greater insight and power of personal achievement.

**Challenge these remarks!** Write to the Rosicrucians, a worldwide cultural organization (not a religion) for the facts about your extrasensory powers. Stop denying the greater part of yourself!

### ACCEPT THIS FREE BOOK

To those who have experienced these deeper psychic aspects of self and want to learn to bring them into service at will, the Rosicrucians offer the free book *The Mastery Of Life*. It tells how you may share in this practical knowledge.

Please use this coupon  
or write to:  
SCRIBE: F.K.C.

*The*  
**ROSICRUCIANS**  
(AMORC)

San Jose, California 95114, U.S.A.

Scribe F.K.C.  
THE ROSICRUCIAN ORDER (AMORC)  
San Jose, California 95114, U.S.A.

Gentlemen:

I am sincerely interested. Send me a free copy of *THE MASTERY OF LIFE*, which tells how I may receive this knowledge.

Name.....

Address.....

City..... State..... Zip.....

# ALL STORIES NEW—NO REPRINTS

FEBRUARY, 1974

VOL. 47, No. 5

**PAMELA SARGENT'S** outstanding new  
short novel, **FATHER** . . . . .

**6**

## new novelets

**WARSHIP**  
by **DAVID REDD** . . . . . **50**

**ANNAPOLIS TOWN**  
by **GRANT CARRINGTON** . . . . . **68**

**MAN IN A VICE**  
by **GREGORY BENFORD** . . . . . **80**

## new short stories

**NO DEPOSIT \* NO REFILL**  
by **ROBERT F. YOUNG** . . . . . **91**

**MAMA LOVES YOU**  
by **DALE RANGLES, JR.** . . . . **95**

## new features

**EDITORIAL** by **TED WHITE** . . . . . **4**

**THE CLUB HOUSE**  
by **ED SMITH** . . . . . **103**

**THE FUTURE IN BOOKS**  
by **KARL P. PFLOCK, CY CHAUVIN**  
and **THOMAS F. MONTELEONE** . . . . . **108**

**OR SO YOU SAY** . . . . . **119**

Cover Copyright® 1973 by **JEFF JONES**

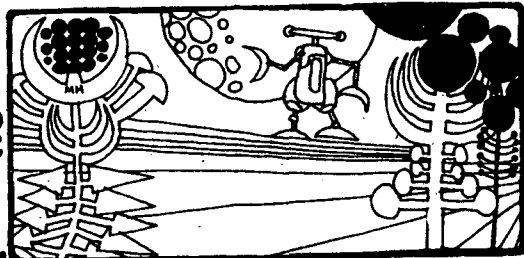
**SOL COHEN**, Publisher  
**ARTHUR BERNHARD**, Associate Publisher

**TED WHITE**, Editor  
**GRANT CARRINGTON**, Associate Editor  
**MOSHE FEDER**, Assistant Editor  
**JOHN BERRY**, Assistant Editor  
**J. EDWARDS**, Art Director  
**PRINT ADVERTISING REP., INC.**, Advertising Manager  
**LILLIAM FRIEDENREICH**, Subscription Manager

AMAZING STORIES, Vol. 47, No. 5, February, 1974, is published by **ULTIMATE PUBLISHING CO., INC.**, 69-82 230 Street, Oakland Gardens, Flushing, N.Y. 11364. 60¢ a copy. Subscription rates: One year (6 issues), United States and possessions: \$3.00, Canada and Pan American Union countries and other mail terms are to be sent to Box 7, dress notices, undeliverable copies, orders for subscriptions, and other mail terms are to be sent to Box 7, Oakland Gardens, Flushing, N.Y. 11364. Second Class Postage paid at Flushing, N.Y., and at additional mailing office. Copyright 1973 by Ultimate Publishing Co., Inc. All rights reserved. Editorial contributions must be accompanied by return postage and will be handled with reasonable care, however, publisher assumes no responsibility for return or safety of art work, photograph, or manuscripts.

ELECTRONIC JOURNAL OF SCIENCE FICTION  
 UNZ.ORG  
 ALL RIGHTS RESERVED

**TED  
WHITE**



## **EDITORIAL**

**TORCON 2:** The 31st World Science Fiction Convention is over by only a few days as I write this, and my head is still swimming with impressions of that long weekend.

How about some superlatives, first? According to *Locus*, the number of members who registered for the convention was 3,490, out of whom an estimated 2,900 actually attended. (Many people join a Worldcon with a "supporting" membership which allows them to cast their votes for the Hugo awards, but for one reason or another do not or cannot actually attend.) Only six years ago 1,500 was regarded as a high point in registration; ten years ago the figure hovered between 300 and 800. With nearly 3,500 members, Torcon 2 set a new record—but one which may be topped within the year. Figures like these place the World SF Convention in the top 10% of conventions held in North America—a fact which holds many implications, some of them ominous (for instance, hotels which can accommodate conven-

tions of this size are few and to be found in only a handful of cities).

However, I've yet to hear a word of criticism directed toward the Torcon 2 Committee, whose efforts to make this a fannishly civilized convention were carried out with grace and purpose. The hard-nosed attitudes which some members resented in the previous two Worldcons were conspicuously absent, and despite the crush of attendees the Torcon 2 was one of the most enjoyable conventions I've been to in many years. (I will blushinglly admit that it was a better-run convention in nearly every aspect than the NyCon 3, which I co-chaired in 1967.)

During one program item—a panel which I shared with, among others, Lester del Rey—the subject of Worldcon size (a topic originally broached in these editorials) was brought up and hashed out to, I hope, the satisfaction of all of the panelists and most of the audience. During the course of this item, Lester made a statement which I cannot quote with

LICENSED TO UNZ.ORG (continued on page 116)

ELECTRONIC REPRODUCTION PROHIBITED

**EDITORIAL**

# "THE OPENING SEQUENCE IS A COMPLETELY UNIQUE AUDIO EXPERIENCE; A MIND-EXPANDING TRIP THAT TAKES YOU TO AN OTHER WORLD"

— Roger Elwood, Editor-in-Chief, Other World Records



*The Tower* starts where 2001 left off.

For the first time on record—a shattering involvement with the OTHER WORLD of stereophonic sound.

OTHER WORLD RECORDS have created a new experience in sound and listening that will envelop you in an environment of sound movement and full-color audio imagery.

Based on the short story by Thomas N. Scortia, the words and music of *The Tower* take you to another dimension.

Feel the five-minute opening sequence depicting transition to a grotesque world via the horrors of the nuclear holocaust.

Live in the new dimension of *The Tower* for timeless moments until the mind-exploding climax grips you, shakes you, exhausts you and leaves you limp and awed at your contact with a different reality!

Utilizing music, electronics and special vocal effects, and combining them under the supervision of the brightest talents in these fields, *The Tower* cre-

ates an intricate fantasy, painting color pictures on the canvas of your mind.

Roger Elwood (the noted Science Fiction Iconoclast) also says of *The Tower*, "I was truly overwhelmed at the scope and intensity of the sound movement and quality...an experience I'll repeat many times in the future."

*The Tower* is the first in a series of audio environments planned by OTHER WORLD RECORDS, available by mail order only. You can take the ultimate trip for just \$4.98. To travel to the OTHER WORLD of *The Tower*, fill out and mail the coupon today!

It's a small price to pay for a round trip to another dimension...

If someone's already ripped-off the coupon below, you can still experience the ultimate trip by sending your check/money order to us for:

12" Stereo Record

\$4.98 plus 52¢ post & hdlg. = \$5.50

Stereo Cassette

\$5.98 plus 52¢ post & hdlg. = \$6.50

7½" ips Stereo Reel

\$6.98 plus 52¢ post & hdlg. = \$7.50

## OTHER WORLD RECORDS

6 W 57th St. (Penthouse), New York, N.Y. 10019

Other World Records, Inc.

6 W 57th St. Penthouse, New York, NY 10019.

I enclose \$\_\_\_\_\_ to cover cost, postage & handling for \_\_\_\_\_ copies of *The Tower*.

☐ 12" Stereo-LP \$4.98 + 52¢ postage and handling = \$5.50

☐ Stereo Cassette \$5.98 + 52¢ postage and handling = \$6.50

☐ 7½" ips Stereo Reel \$6.98 + 52¢ postage and handling = \$7.50

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

NY Residents please add 7% sales tax. A/M

*Pamela Sargent is a young woman with an already impressive list of credits: over twenty short stories and novelettes have appeared in The Magazine of Fantasy & Science Fiction, New Worlds, Terry Carr's Universe, David Gerrold's Protostars, and such anthologies as Eros in Orbit, Ten Tomorrows, Two Views of Wonder, Continuum, Wandering Stars, and And Walk Now Gently Through the Fire. Readers of the latter book will recognize her story there, "A Sense of Difference," as a sequel to "Father." Both are parts of a forthcoming Fawcett Gold Medal novel, Cloned Lives.*

# **FATHER**

## **PAMELA SARGENT**

As the jet approached the Dallas-Fort Worth Regional Airport, Paul Swenson could see the nearest of the circular loops that made up the huge, monotonous but efficient structure. There were thirteen circles, although Paul could not see them all from his seat, each of them more than a mile in circumference, each containing six sub-terminals, stretched in a row across the Texas plains. The circular loops were connected by a spine running down the center of all of them, a row of roads connecting the airport with Dallas and Fort Worth. The airport had been designed for efficiency, with decentralized terminals and underground trains linking the loops. It had one purpose and that was to move the passengers in and out of

the airport as quickly as possible. Paul remembered the brown concrete of the terminal and the unending repetition of the structure, the same no matter where one turned, and wondered who would care to linger. The architect had made no aesthetic concessions. Yet from the air, it was still an awesome sight, giant hieroglyphics seemingly carved out of the brown dusty land.

"I still think I'm right, Paul," muttered Morris Chang. Paul glanced at his young companion. Chang was slouched in his seat, running a hand through the red hair that contrasted so sharply with his dark almond-shaped eyes. "I just gave my paper too soon. I may not have all the evidence I need but I feel as though I'm close to the truth." Chang stared ahead glumly.

**Illustrated by JOE STATON**

LICENSED TO UNZ.ORG  
ELECTRONIC REPRODUCTION PROHIBITED  
AMAZING





Paul had been listening to this conversation, with slight variations, ever since their sub-orbital flight from Brussels. When they had transferred to the jet at Cape Kennedy, Chang had lapsed into silence, then began ordering double Scotches from a stewardess a few minutes after the jet's takeoff. Paul had finally persuaded his friend to have some coffee. Chang's sober depression was a contrast to the alcoholic gaiety he had displayed throughout most of their flight, a gaiety that had been cut short by a husky steward about an hour ago.

The plane began to circle over one of the loops' below. "I think Irina Rostova," said Chang, "was the one who actually finished me. I just couldn't handle her questions, and after that I was too demoralized to answer anyone else's."

"Look, Morris," Paul said, "this was your first time, giving a paper before a group like this. Rostova's been going to these conferences for years. She knows how to find the holes in anyone's work. A valuable function, I suppose, but I have yet to see her present anything of her own that isn't trivial. She never risks the kind of treatment she hands out to other astrophysicists."

"I don't know," Chang said sadly. Paul sighed. He had encouraged the young man to present his theory as soon as he heard about it. Chang was working out a theory of stellar evolution that would account for and include pulsars, quasistellar objects, "black holes" and other such phenomena.

"Look," said Paul, trying to cheer his friend up, "you're working out something pretty important, and difficult. You'll patch up the holes, I have no doubt about that. I told you how excited Marcus was. He'll be writing to you about some of the problems, he thinks he can help. You know perfectly well you were ready to present the outline of your theory. You're just upset because you're not used to giving papers yet."

"You're probably right," said Chang, who looked a little happier.

Paul remembered a similar conference twenty years ago. He had been twenty-nine, the same age as Chang, ready to present his first paper at an international gathering of scientists. His paper had also been greeted with some skepticism. He had started to succumb to his nervousness and fear, regaining his confidence only when Eviane began to defend him strenuously, buzzing furiously at the others in the room.

Chang seemed to be cheering up, but the thought of Eviane draped a shroud of sadness over Paul. She had been dead for almost six years and he still could not accept the fact. Even now, Paul would find himself turning in his seat, expecting to find her next to him. He would begin to speak to her and then remember that she was gone.

He had met Eviane when they were both twenty-eight. He was working at Mount Palomar and had just arrived at the observatory, anxious to use every minute of the time allotted to him. There was no



one in the observatory except a tiny blonde who looked about sixteen years old. He wondered what had happened to his assistant.

The blonde girl was pacing in front of a desk and chewing at her nails. She stopped and looked at Paul speculatively. Her eyes should have been blue, he thought. Instead, they were as black as the nighttime skies. "I wish," she said loudly, "they allowed smoking in here, I'm having a fit. Are you Swenson?"

"Yes, I'm waiting for my assistant. I was told someone would be here to help with my observations."

"I know. I'm the assistant." Paul tried not to look surprised but didn't succeed. "All right, Swenson," she went on, "I know you didn't expect a ball of blonde fluff here but that's what you've got. I have a degree in mathematics, I have a doctorate in astrophysics, I've published a couple of papers. Maybe you read them. I'm Eviane Fossorier." She glared at him defensively. "I knew a guy once who said he couldn't take anyone under five feet two inches seriously, they were just too damned small. I hope you're not like him."

Paul was feeling a bit ashamed of his six feet in height. "I didn't say anything," he said.

"You were thinking it, Swenson. Let's get to work, we're wasting time."

He had married her three months later. They had always worked together, sometimes combining

their abilities, sometimes working on different things, criticizing and advising each other. There was no room for children in their life, and Paul had never regretted it until Eviane had died. Now he had nothing of her except her papers and his memories.

*She was a small bird, fluttering nervously in the rooms of their house, obsessive in her desire to organize her nest, always coming to rest in his arms. Don't ever fly from me, Eviane.* But she had at last, stricken by a peculiar disease that would not allow her to absorb the nutrients her small body needed. She had grown thinner and weaker, unable to sustain herself. She had weighed only forty-eight pounds at her death.

Time, Paul thought, is supposed to make these things easier to bear, soothe the pain. Time had not worked for him, just as it had never eroded his feelings for her during her lifetime.

The jet approached its runway and began to land, a giant metal eagle shrieking for its prey.

"So what are your plans for the immediate future?" Chang asked.

"I thought," Paul said, "that I'd just take the train into Dallas and get a hotel room, I think I can use some rest before I head home."

"Rest!" Chang chuckled. "You must be suffering from time lag, don't you know what tonight is?"

"No, at least I don't think . . . ." Paul paused. "Wait a minute, it's New Year's Eve, isn't it."

"New Year's Eve, 1999," said

Chang. "I just want to head home and lock my doors. I sure wouldn't want to be in Dallas."

"I don't know how I could have forgotten." Paul looked at Chang. "Do you really think it'll be that bad? I mean, I know New Year's Eve isn't exactly quiet, but I figured I could lock myself in the room and ignore it."

"Well, Paul, I don't know how it is in your Midwest, but Dallas has been close to hysteria recently, it was like that when I left after Christmas. After all, this isn't just New Year's, this is a new millenium."

"Properly speaking," muttered Paul, "the new millenium doesn't start until next year."

"Try telling that to the Apocalyptics, or the ones who expect to see Christ reappear." Morris sighed. "I'd better put you up at my place, Paul. We can just ride the train through Dallas and you can catch your train tomorrow."

"I don't want to put you to any trouble."

"It's no trouble."

"All right. I suppose you know what you're talking about." Morris lived outside Dallas in a suburb that was conscious of security. Armed guards patrolled the community and no one could enter without a resident or guest pass. Paul had never felt at ease in such places and knew that their very existence was an admission of some fundamental social failure. Perhaps potential disrupters were shut out, but the citizens were also shut in. It didn't

cure anyone's paranoia either. Paul had seen people glancing fearfully at every strange face that passed through their streets. The carefully guarded suburbs were luxurious garrison states.

The jet had landed. Paul unfastened his seat belt and straightened his suit. For some reason, Chang's talk about the Apocalyptics reminded him of the discussion he had with his friend Hidehiko Takamura before leaving for Brussels. Paul didn't particularly want to think about the discussion at this time, but couldn't help it. Hidey Takamura had been insistent. Paul would have to make a decision soon.

For now, he put Hidey out of his mind and prepared to leave the jet.

## ii

IDEALLY, there should have been no waiting at the Dallas-Fort Worth Regional Airport. It was necessary only to walk about a hundred feet from the plane to the terminal, pick up one's luggage, and then walk another hundred feet to an underground magneto-train-station.

In fact, Paul and Morris had to wait an hour before even getting their luggage. The detachable luggage compartment of the jet was malfunctioning and at last a repair crew had managed to wheel it over to the terminal. There was another wait for the train. When Paul and Morris finally boarded it, the train was crowded and Paul was beginning to feel hunger pangs.

They found a seat and placed their suitcases in an overhead rack. "What time is it, Morris?" Paul asked as they sat down.

"Almost eight. I was hoping we would be enjoying supper by now, but . . ." Chang shrugged. "We don't usually have these delays, if that's any consolation."

Paul settled back in his seat and began to relax. The train hurtled through its tunnel, emitting only a low humming sound.

Paul found himself again thinking about Hidey Takamura's proposed project. Hidey was a geneticist, and he had long been chafing under restrictions placed on his work by the moratorium on genetic engineering. Of course, Hidey's field wasn't the only one affected. The twenty-year moratoriums on certain types of scientific research, put in effect by committees of scientists working with the United Nations, applied to a great many fields. But the biological scientists had been the focus of most of the hysteria and fear people manifested when faced with new developments, and they were under more stringent regulations. By 1980, there was a moratorium on almost all genetic research, with few exceptions. One of the developments allowed was an ectogenesis chamber, an "artificial womb" which could nourish a fetus until birth. It was used only in cases of grave need, for women who could not survive a normal pregnancy or who bore premature children. Artificial insemination was still prac-

ticed, but limited now to very few people in the interest of preventing overpopulation. All experimentation with humans had been banned.

Biologists had argued against these restrictions in vain. Journalists, and some scientists as well, had conjured up fearful notions of what might happen to the race if genetic engineering became a reality. Most people felt the restrictions were justified. And governments, thought Paul, had been meticulous in supporting the restrictions, more out of fear than anything else. As long as one country didn't experiment, the others would not feel pressured to do the same. And there was no doubt that there were real dangers involved in genetic engineering, although Paul wondered if a moratorium was any solution.

But with the beginning of the New Year, and the new millenium, the moratorium would expire, at least temporarily. Hidey had been preparing for this for quite a while. If Paul would cooperate, Hidey would make his move.

Hidey Takamura was familiar with embryology as well as genetics, and specialized in cloning. He had cloned several types of animals, allowed under the moratorium, helping in the restoration of a few endangered species. But he wanted to try with humans. The moratorium was running out. He had to move fast, in case the ban was re-imposed. He needed a donor of genetic material. He had decided

upon Paul Swenson.

Paul considered Hidey's motives. He had no doubt that his old friend meant what he had said, that he must find out if he could accomplish the task and what the results would be, that it was a matter of advancing scientific knowledge. Yet Paul knew Hidey well enough to realize that Hidey also wanted to be first, to become a scientific immortal.

"Why me?" Paul had asked when the project had first been suggested to him. "There are plenty of people who would be more valuable, who have more to offer than I do."

"That's one reason right there," Hidey said. "Because you ask that question. I don't want an egomaniac, and I'm afraid many gifted people are egomaniacs. You're a brilliant and compassionate man, you're aware of your faults as well as your gifts. I've known you for almost thirty years and I've seen how you act in different situations. You are also, unlike others, capable in many fields. Your popular texts on biology and chemistry are better than anything I've seen of that nature, even ones written by specialists. You have a natural talent for music which you don't have time to explore fully. I've even seen those poems you hide from almost everyone else. People like you are limited only by the fact that they have one lifetime. Imagine what five or six Paul Swensons could do."

"I think you're wrong there," Paul had replied. "If you have a

group of Paul Swensons, I don't see why they wouldn't wind up doing exactly what I've done. It would just be duplication. And the fact that they are exactly alike would probably affect them badly. They might have my temperament. I'm not the most stable person, Hidey. You know how moody and depressed I can get."

"You're thoughtful," said Hidey, "and any thoughtful person is liable to feel depressed, even suicidal at times. And I grant you that if we were cloning a narrow talent, we might wind up with people who would duplicate each other's efforts. But with a person of diverse talents, like yourself, we might wind up with people who could put each talent to its maximum use."

"Still," Paul said, "there's a reason why I chose the field I did. I felt that's where my best abilities lay. Any clone would feel the same."

"That's one of the things I want to find out," said Hidey. "You might be right, but we won't know until we try. Genetic inheritance is like clay, Paul. You're limited by it, but there's also a lot you can do with it. Your environment influences you, and you can make choices. I've seen artisans make things I didn't think could be made with clay, and I've seen people do things that seemed to be far beyond the abilities nature gave them. Your clones would at least start out with some damned good clay."

Paul had considered the proposal, and yet was dubious about

the project. Maybe he was not as immune to the hysteria around him as he thought. Why me, he thought again, why me?

"I don't want unnecessary flak," Hidey had gone on. "I know I'm going to get some grief, and I can minimize it using you. You're the man who laid the theoretical groundwork for a star drive, and there are more than a few whose only knowledge of science came from your books. You are a symbol of hope to many people, you're admired. If I'm going to clone anybody, it might as well be you. Maybe those clones will continue your work and get us to other stars."

*Why me?*

"Cheer up, things aren't that bad," said Morris Chang, startling Paul.

He grinned at the younger man. "Well, I'm glad to see you're feeling better, Morris. For a while there, I thought astrophysics would lose you to a whiskey bottle."

"Well, now that I'm away from that conference, all I want to do is get back to work."

"You'd better. My star drive hypothesis would fit very nicely under your theory's umbrella, and I'd rather have it there than out in the rain with all the other anomalies." Morris chuckled.

Suddenly the train hummed to a halt.

"What's this?" Paul asked, glancing at his companion. "I thought this train didn't stop until we got to Dallas."

"It doesn't," said Chang.

"Please remain seated," a voice said over the train's speaker system, "There is a temporary delay, please remain seated."

"This isn't my day," said Paul. "First the jet and now this." He sighed. There was no sense in being impatient, as there was little he could do about the delay. He began to look around at his fellow passengers.

Someone nudged him from behind. Paul turned in his seat and found himself staring at a bony, intense-looking young man.

"It's started already," said the young man. His brown eyes were the dominant feature in his face. "We may sit down here forever, buried from the sight of God."

"What do you mean?" Paul asked. Chang was also watching the young man.

"Everything is running down," the man whispered. "By midnight, it will have stopped. The dead will be resurrected. What a sight! I don't want to sit down here, I'll miss it all. By the time we're called to Judgment, we'll have missed the whole thing."

The train started to hum at this point and crept forward slowly. "Well," said Paul, trying to smile, "it hasn't quite stopped yet."

"It will," said the young man. "You had better prepare your soul for Judgment." He stared intently at Paul.

Paul was not certain whether the young man was an Apocalyptic or one of those who expected Christ to

reappear, but it was hardly a crucial distinction. He was uneasy in any case.

"This train's moving pretty damned slowly," muttered Morris. "At this rate, we'll be lucky if we get to my house before ten or so. I'd better call Joanne at the Dallas station."

"I think we'd be better off staying on the train," Paul replied. "The one behind us is probably moving just as slowly."

"You'd both be better off if you started praying," said the young man behind them.

The train was approaching one of the stations on the outskirts of Dallas. Normally it would have passed this station since it was an express, but it began to slow down once again.

Paul looked out the window at the platform outside. A group of soldiers was standing near the train, holding stun guns. A small crowd was milling behind them.

"Clear the tracks," someone was shouting through a loudspeaker. "Clear the tracks, or you will be placed under arrest. Clear the tracks."

"They're holding up the train," a young girl across the aisle from Paul shouted. "Let's go see." The girl and two other people hurried into the next car, running toward the front of the train.

"Clear the tracks," the loudspeaker shouted again.

"Jesus Christ is coming," a female voice cried out over another loudspeaker. "Pray for your souls,

brothers and sisters, the Lord is coming!" Paul looked around the train and saw the young man behind him and a girl in back of the car on their knees. When he looked back out the window, he could see soldiers dragging a few people along the platform.

Apparently the track had been cleared, because the train began to move once more. The platform disappeared and Paul again saw the dark tunnels around the train. "It looks," he said to Morris, "as though things are getting an early start."

Morris didn't reply. The train was moving rapidly now, humming quietly.

It seemed only a few minutes before the train pulled into the main Dallas station. There were a large number of soldiers at this station too. Several people began to get out of the train.

"Attention, all passengers," a voice said over the speaker system. "Attention. If you are leaving Dallas, you must transfer to the elevated train in station D, two floors above. Underground trains will not leave Dallas for another two hours. Our apologies for this delay, and thank you."

"Come on, Paul," said Morris as he stood up. Both men grabbed their luggage and began to follow other passengers out of the train. They pushed through the crowd over to the side of one soldier, a husky young man with a handlebar moustache. "Excuse me," shouted Morris at the soldier, "but can you



tell me what's going on?"

"Goddamn Apocs. They're in the tunnels, holdin' up trains." Morris turned and Paul followed his friend through the crowd. They hurried up a flight of stairs to a large lobby. In the middle of the room, Paul saw a small group of people on their knees.

"I don't want to die," a voice near Paul cried. He twisted around and found a stocky dark-haired girl clutching at his arm. "I don't want to die." Her brown eyes were wide with hysteria.

"You're not going to die," he said to her. He felt helpless, wondering what he could do.

"Come on," shouted Morris. He grabbed Paul and pulled him away from the girl.

Paul followed him through the lobby to another flight of stairs. They climbed them as rapidly as the mob of passengers would allow. When they reached the top, Paul could see people pushing their way into the elevated train. He and Chang managed to board it just as the doors were closing.

They were standing in the first car of the train. It was filled with people, both standing and sitting, and Paul knew that he would not find a seat in any other car. He put down his suitcase and leaned against one of the seats. He and Morris were close to the front of the car and Paul watched as the motorman climbed into his cab. Although the train was run automatically, a motorman was always on board in case of an emergency, a

practice Paul usually regarded as needless featherbedding. But he was glad to have the man on board tonight.

He looked around and noticed that some soldiers had boarded the train. One of the soldiers, a tall slender woman in a white helmet, remained in the front car while the others dispersed. She spoke to the conductor, then started to push her way to the motorman's cab. As she shoved past Paul, her leg jostled his suitcase. Her blue eyes glared at him.

"Get this thing out of the aisle—there's room up by the cab." Paul picked up the suitcase and followed her, with Morris right behind him. The train began to move forward. Paul rested against the cab and glanced out the front window at the tracks. Then he turned to Morris.

"What'll we do when they start collecting tickets?"

"Don't worry," Morris replied. "I have a commuter pass book, but I don't think they'd throw us off in any case." Paul looked around for the conductor and saw him standing near one of the doors. He didn't seem interested in ticket collecting at the moment.

"Attention, all passengers." The soldier was speaking into a microphone attached to the cab. "Please don't be alarmed by the soldiers on this train. We are here to insure your safety, so you are asked to cooperate with us. Thank you."

"The whole damn world's gone crazy," said a fat man in the seat

next to Paul. The man was sitting with an astonishingly beautiful redheaded woman dressed in a long green gown.

"We should of taken the earlier train, Joe," the redhead muttered. "Now we'll miss most of the party." She looked up at Paul. "They say the world's going to end."

"I doubt it," said Paul.

"If it is," said the woman, "they're sure helpin' it along. I'm glad I'm out of the Service—my whole night would of been ruined."

The fat man was looking out his window. "Oh, my God," he mumbled. "Oh, my God." Paul peered out the front window and noticed that the sky seemed lighter than it should be. Then he saw flames shooting toward the sky. The fire could be no more than a few blocks from the train tracks.

"I'm scared, Joe," the redhead moaned. The train passed the burning area and Paul saw more flames, further away, burning near a large latticework which was going to house an arcology. The large hexagonal structure looked vulnerable in the fiery light and its metal supports shone brightly, reflecting the fire. Groups of Apocalyptics had been claiming for weeks that civilization would have to die in preparation for a new age. Most were willing to let God handle the job, but a few were apparently trying to make their prophecies come true.

Paul turned away, sickened and saddened by the sight. "We don't

have too far to go, Paul," Morris said. "It'll be safer outside the city." Morris sounded as though he was trying to console himself as well as Paul.

The train began to slow down as it approached a station. "Here's where we get off," said fat Joe.

"Do you think it's safe?" asked Paul. The fat man peered out the window.

"Looks like it," he replied. The station at which the train stopped did appear quiet. The doors opened and a few passengers rose from their seats.

And then Paul saw them. They ran into the station suddenly, screaming at the train, and he could tell that they were not those who were content to pray passively while waiting for the world to end. The train doors closed and Paul realized that the engineer must have decided to pull out of the station. But before the train could move, several people appeared on the tracks. The train couldn't move without running them down.

Faces, garishly painted, stared in at them through the windows. Then Paul heard another sound, the sound of metal grinding against metal. Two men were standing near the door of the front car, trying to pry it open from the outside. Paul didn't see how the small group of soldiers with them could handle the mob.

The tall slender soldier was pounding on the cab door. "Move this train," she shouted, "move this train right now." She pulled the

door open.

"I can't," said the motorman. "I'll have to run them down."

"Move!" the soldier cried. "I'll take the responsibility. That mob is out for blood, you're risking the lives of the passengers. Move!"

"Just let them try to get on this train," said the redhead. She was kneeling in her seat. Her lovely face was contorted with rage. The mob outside was chanting, but Paul could hear only an undifferentiated roar.

"I can't," said the motorman. A passenger near the door screamed, then another near the back of the car. People were starting to succumb to hysteria. Paul could see the edge of a crowbar between the doors of the car. It couldn't hold much longer.

"Damn it," shouted the soldier, "get out of that cab before I haul you out." She held the motorman by the collar. The man stumbled out and she climbed in quickly.

The train suddenly lurched forward and the brightly painted faces disappeared. Muffled thumps sounded against the train, shaking it slightly. Then they were on clear track, moving again. The motorman had collapsed on the floor next to Paul, holding his face in his hands.

Paul looked away from the blood-streaked windows and felt nauseous. All the illnesses of the past century seemed to have reached their fruition. He thought of the flame-filled sky of Dallas and wondered if they would burn

themselves out at last. He so often felt like an observer of the world around him, marveling sometimes at the irrationality of humanity as one might wonder at strange customs or superstitions. At other times he was in the grip of a feeling close to despair, worrying about humanity's aberrations and seeing the seeds of the disease in his own mind as well. But now he felt fear, a blind, unreasoning fear of the others of his own kind, helpless and unable to act. He had never felt that way about people before. He thought about his own work, his dreams of seeing humanity on other worlds, and wondered if he had only been aiding the spread of a cancer throughout the galaxy.

"Paul," Morris was saying, "Paul, are you all right?" The words seemed to float to him through a fog. He managed to shake off the feeling and nodded. Then he squatted next to the motorman, hoping he could console the man.

"My God, my God," the motorman moaned.

"Served the bastards right," the redhead muttered.

The train hurtled on through the night.

### iii

**P**AUL WAS RELIEVED to be home. He had spent three days in Dallas with Morris Chang, trying to aid some of those who had fled the city in terror. When he left, Morris had decided to temporarily house a family whose home had been

destroyed.

He stood in the small train station, inhaling the crisp winter air. He had almost expected to see ruin here too, but everything appeared unchanged. A white blanket of snow covered the ground in front of him and the city across the river from the station had a silvery glitter in the sunshine.

At last he saw the stocky form of Jonathan Aschenbach trudging toward him. "Am I glad to see you," he said as Jon approached. "I feel as though I've been away for years."

"You don't know how relieved I was when you called," Jon said. "After what I heard, I didn't know if we'd ever see you again." Paul picked up his suitcase and they began to walk toward Jon's car.

"I heard it was worse in other areas," said Paul. "I expected to find nothing here when I got back."

"Well, there were wild parties, and some naked folk running around in the snow, but I guess we're basically stodgy. Only two cases of arson in the whole city." They stopped next to the car. Jon opened the door and Paul hoisted his suitcase into the back seat.

"Thanks for picking me up, Jon."

"Don't mention it."

"Thank God Morris Chang lives where he does." Paul climbed into the car. "He keeps most of his notes at home. A whole general theory of cosmology could have gone up in smoke."

- Jon began to drive the car out of

the station parking lot toward the new stretch of automated highway. As they approached the highway, Jon punched out his destination and the car moved along the access ramp, shooting out automatically into the stream of traffic.

"You can relax now," said Paul. Jon was still watching the highway attentively, holding the steering wheel with his hands.

"I still don't trust these highways," Jon said. "I'd rather stay prepared for an emergency. It's hard for me to just let go of the wheel and let the highway take over."

Paul had no difficulty in trusting the automated highway, feeling safer on it than on roads where cars were operated manually. The automated highways were a relatively new development and he doubted that they would ever replace local roads, but they were useful for traveling long distances. Although trains were popular, and necessary for traveling to cities where cars were not allowed, many people were too used to private transportation to give it up. The cars, with their non-polluting engines and safety equipment, lacked some speed and maneuverability when driven manually. But on the automated highways, run by remote control electronically, they could travel at speeds up to seventy miles an hour. All things considered, Paul regarded the cars as an improvement over the ones he had driven in his youth.

"I think Hidey wants to talk to

you," said Jon. "He asked me to tell you to get hold of him right away, as soon as he found out I was picking you up."

"Well, I feel like relaxing today," Paul said. "I'll call him later on this week."

"He said it was pretty important." Jon seemed to be forcing the words out.

"You still don't approve of the whole thing, do you." Jon did not have to reply. Paul and Hidey had talked with him about the prospect of cloning, partly because Hidey wanted to hear another point of view on the project and partly because of the friendship the three men had for each other. They had been friends ever since they were undergraduates. Although Hidey had eventually gone into genetics, both Paul and Jon had been students of astrophysics. Jon had shown great promise in the field and acquired his doctorate before making a decision to which Paul was not even now fully reconciled. Jon had decided to become a minister, after years in which he had flaunted his atheism. He was now the minister at a Lutheran chapel near the university where Paul taught. Although he occasionally helped Paul with some of his papers, Jon's energies were taken up most of the time by his duties as a minister.

Jon had been startled when Paul and Hidey revealed the planned clone project to him. Paul knew that Jon would not raise objections based on purely theological

grounds. Those objections were in a sense unverifiable. But Jon did have ethical objections.

"You must realize," Jon had said as the three sat in Paul's living room, "that you are violating a rather basic principle here. We've always assumed that any kind of experimentation involving human beings requires the consent of those concerned. Their permission must be gotten and their decision has to be based on knowledge of the possible consequences, they have to be aware of the dangers involved. I assume you two are aware of any dangers as far as you're concerned, but what about the clones you produce? You can't gain their permission for the experiment as they do not yet exist. Yet their lives may be filled with problems you can't even predict. I'm not just talking about the way other people may treat them. You don't really know what they'll be like. They may not be able to function except as a group, as one entity. They may have only one consciousness among themselves."

"That's a silly supposition," said Hidey. "We have the experience of identical twins to go by here. The bonds between twins may be strong ones, but they certainly do not have only one mind. And as for the rest of your argument, well, we might as well tell people not to have children, since the children can't give their permission before they're born."

"Oh, come on, Hidey, that's not the same at all. And in fact don't we all believe that parents do have

some responsibility for their unborn children, that they shouldn't bear them capriciously or without some concern for their welfare? You're evading my argument. You still have to violate a principle that I regard as basic as far as experimentation is concerned, and which is one of the reasons I've been opposed to most biological experimentation of whatever sort. And even if we leave that aside, consider the implications of cloning itself. If it works, and you haven't given me any reason to think that it won't, every narcissist alive will be trying to use it. You'll be interfering with the course of human evolution with no conception of what the results might be. What would happen in the long run if even a sizable minority decided to reproduce in this way? You can't know."

"But we're assuming," said Paul, "that there will be some kind of control. The moratorium's expiring, but I think it's unlikely that we'll move from such a rigid restriction to no controls at all."

"But you don't know," Jon went on. "Scientists, as you well know, or should by now, don't have everything to say about how their discoveries will be used. You seem to be doing this for only one reason, simply to see if it can be accomplished. That's not good enough, not with anything as potentially volatile as this."

"But wouldn't you rather have us do it than some other group?" asked Hidey. "At least we're aware of these problems. Someone else

might not care."

"Besides," said Paul, "this isn't a terribly radical project. Look at Hoyt's experiments in brain chemistry, if he could work with people, he could theoretically drive a sane man to murder. Or consider Lubaaya's work on gene manipulation—he's got a gorilla in his office working as a file clerk. Things like that would have far more radical consequences than anything Hidey's doing."

"That's no argument, Paul," said Jon, "and you know it."

"Damn it, Jon," Hidey said, "I don't think it's so unimportant to find out if cloning can work. The option has to be made available to people. We can't afford to lose valuable abilities simply because the person who possesses them has only one life in which to accomplish anything. And there may well be other applications of the technique that we're unaware of now, but which could be crucially important later on. I want to move on this project, and I have to do it now. I think the restrictions will be back with us before long, I'd bet on it. If we can accomplish something in the interim, and show people that something constructive can come out of such work, maybe they won't be so frightened of it in the future. It's ultimately self-defeating to restrict research out of fear. We have to learn to use our knowledge constructively, and you don't do that by hiding from it and suppressing it. You end up with ignorance and fear."



Hidey had looked exhausted after making that statement, and Paul had seen that Jon too was affected by it. The stocky minister had fallen silent, running his hands through his grey hair and staring at the floor. At last Jon looked up again.

"Maybe I was wrong about some of your reasons," said Jon. "But I still think, Hidey, that you also want to make a name for yourself in your field, God knows you haven't been able to do much under the moratorium and this may be your only chance. And maybe you," he went on, turning to Paul, "need someone to at least partially relieve some of your loneliness since Eviane died. The clones will be your only children."

The car rushed along the highway. Paul glanced at Jon and wondered if he might have been right. What were his motives anyway? He wasn't really sure. Perhaps he was not really considering this business as carefully as he should, but was simply letting himself be pushed into it. He hadn't even thought about how people might react to the project when they finally learned of it. He remembered the hysteria of New Year's Eve and shuddered. Perhaps that should be his biggest worry of all. How would that mob have felt about the existence of a group of clones?

"I still haven't made up my mind, you know," he said to Jon. In a way this was true, yet Paul felt as though he had already assented to

the experiment and the rest was simply a matter of details. He knew that he would go through with it eventually and had in fact already started planning for it. "I've been thinking about what you said, Jon."

"I doubt that it'll have much effect on you, Paul. If you agreed with me, you would have already dropped any idea of participating in this business." Jon looked away from the road and directly at Paul.

There was nothing to say in reply. "I imagine," Jon went on, "that you'll probably go ahead. Well, I'm still your friend, Paul, and Hidey's too. I have a feeling you may need all the friends you've got pretty soon."

Paul thought of the mobs in Dallas and realized Jon was right. There was no telling what public reaction would be and how much of it would focus on himself. Although Hidey and his people would be conducting the experiment, it was Paul whom they would clone and Paul who would be granted, in people's minds, the real immortality. What would they think of a man who had been duplicated several times?

And how would they treat the clones? Paul wondered if they would live to curse his name. He had decided to raise them himself, feeling that it was his responsibility. Hidey didn't think this was necessary, but Paul did. He would be their father, more than a father. They would literally be portions of him, reflections of him. There was no way he could avoid this responsibility and in fact he had almost

welcomed it. Was it a need to alleviate his loneliness after all?

"I don't really *feel* that I'm doing anything wrong," he said to Jon. "I know that's not the most reliable indicator, but it's served me well enough in the past."

Jon was silent and Paul knew that his friend was not about to provide him with any comforting rationalizations. The car was suddenly filled with a loud buzzing noise and a light on the dashboard began to flash. Jon prepared to resume control of the vehicle. They turned off the highway and toward the road that led to Paul's house.

iv

"**W**E HAVE to move fast," said Hidey, "there's no time to lose." Hidey Takamura, at fifty, was still a youthful man and Paul often asked his friend if he had been engaging in gerontological research. Hidey's hair was still black, his face unlined and his weight the same as when they were undergraduates. Hidey's office was already clouded by the smoke of his cigarettes, which he continued to use in defiance of what Paul considered good sense.

Paul was sitting with Emma Valois on the other side of Hidey's desk. Emma, although a psychiatrist, was also involved in the project. She would not be working in the laboratory but would study the psychological development of the clones after their birth. She was a tall lanky woman in her thirties with prematurely greying brown

hair and hazel eyes. She was also one of the few people Paul knew who displayed complete self-confidence and control of circumstances around her. She had been examining Paul ever since November, trying to uncover any psychological flaws that might affect the clones or indicate that Paul was a poor prospect.

"Emma's given you a clean bill of health anyway," said Hidey, waving his cigarette in the air.

"I won't say you're average, or even normal," Emma said. "You have a tendency to get extremely depressed, I notice, but probably for good reason, and it hasn't debilitated you yet, so I don't suppose it will. And your family history doesn't indicate anything that might be genetically rooted. I must confess I was wondering about that grandfather who committed suicide." Her handsome face watched him speculatively.

"Jesus, Emma," said Hidey, throwing his hands up, "don't turn him down now. Everyone else I know is completely crazy."

"I don't think," said Paul, "you should hold that against me. Besides, he was an old man at the time, and very sick. He didn't want to linger on as an invalid."

"Personally," said Emma, "I don't like to rationalize any suicide, but . . ." She shrugged. "I guess you'll do. Damn it, Hidey, I wish you'd give me more time, those damn machines and tests can't tell me everything."

"Sorry," said Hidey, "I can't

give you the one or two years I know you want. We've got to start, and by next week if possible."

They had decided earlier that they would create six clones. Hidey wanted to be sure that there would be enough for a proper study. It would be interesting to see whether an identical group of that size would diverge or remain similar in their pursuits. Hidey also wanted to allow for any error. It was conceivable that not all the clones would survive. Paul pushed that thought out of his mind.

"How are you going to care for them?" asked Emma.

"I'm trying to find a reliable couple around here."

"Just don't tell them anything," said Hidey, "and for God's sake make sure it's somebody who won't be scared off when they find out it's going to be a bunch of clones. And when you've narrowed it down to two or three couples, make sure you send them to Emma right away."

"I'm having enough trouble trying to find one couple."

"You've got a good nine months for that." Hidey leaned back in his chair. "The ectogenesis chamber has never been used immediately after the moment of conception except with animals, but it should work with humans. We have the best ones we could get and we've added some refinements of our own. Frankly, we would have had trouble lining up six women as hosts, and that would have also introduced some variables I'd just as soon avoid. I was thinking, Paul, it

might be interesting to have two female clones in the group."

"Why two girls?" Paul asked, and was rewarded with a glare from Emma.

"Look," said Hidey, "we're dealing with a group that's genetically identical, right? The *only* difference among them will be the gender. I want to see if that makes any difference in their personalities and development."

"Oh, honestly, Hidey," Emma said, "I can't believe that you think it will."

"We don't really know, do we," Hidey went on. "This is a unique opportunity to investigate. It may not matter but we might as well check it out." He put out his cigarette and promptly lit another one. "Do you mind having a couple of daughters, Paul? Or sisters. Hell, it's hard to figure out what relation they are to you."

"Socially, they'll be daughters, and of course I don't mind. But you may not prove much one way or the other. I'm almost fifty and kind of settled in my ways. I might treat my daughters differently from my sons and not even realize I'm doing it." *Daughters*, he had said. Already he was thinking of them as his children, worrying about them before they even existed.

"Well," said Hidey. The three looked at each other and then away. "We'll be ready to start in a couple of days. Frankly, I'm scared."

"I'm glad to hear it," Emma said. "It makes me think you're not

so crazy after all."

v

PAUL SAT in the faculty lounge of the biological sciences building and wondered if his apprehensive feelings were the same as those of anyone about to become a parent. Probably worse, he thought. He had to sit there and look calm, in case someone overly inquisitive should walk over and ask him what was the matter. He was not proficient at lying. He would be forced to ignore the person or be overtly rude, and he wasn't good at either. Outside of the people involved in the experiment, and Jon Aschenbach, no one could know for another nine months at least.

Paul understood the procedure for cloning. The nucleus would be removed from the unfertilized female egg cells. In the absence of this haploid maternal nucleus, diploid material obtained from Paul would be inserted in the ovum. The egg, having a full set of chromosomes instead of a half set, would begin to divide as though normally fertilized, becoming a blastocyst. The blastocyst, programmed entirely with Paul's genetic endowment, would be implanted in an ectogenesis chamber. It would then attach itself to the wall of the chamber, protected by a synthetic amniotic fluid and nourished by an artificial umbilical cord which wound around the outside of the "womb". At least they'll have navels, thought Paul, almost chuckling aloud at the idea. The

ectogenesis chamber could expand as necessary throughout the "pregnancy", in imitation of a natural womb. After nine months, the clones would be removed from their chambers, be spanked, Paul supposed, and cry like any other children.

Paul had not wanted to be in the lab while the process of conception was taking place, nor even in Hidey's office. He worried about this now, wondering what it might mean. It suddenly struck him as ludicrous not to be present at the conception of his own children and he almost laughed aloud. But then he was pensive again, thinking that the clones might hold it against him some day. He was not indifferent, he knew that. Perhaps he was simply afraid to see this occur in the lab, maybe it was a threat to him psychologically in some way he did not fully understand. Men whose wives conceived by artificial insemination were often told to make love to their wives during the same day. This allowed them to believe, if they needed to, that the child just might be the result of their own natural efforts. Paul could not protect himself in any similar fashion.

*But I want those children.* The desire seized him more fiercely than it ever had in the past. *I want those children.* Wasn't that really the important thing after all? Many children were only accidental byproducts of a careless night, the focus of an unfulfilled parental ambition, or conceived as pawns to be

used in a loveless battle. Some, even now, were concessions to a society just beginning to realize that parenthood was not a goal to which everyone should aspire. Paul had achieved most of his goals and was as satisfied with his life as he could be. For the first time in his life he felt ready for parenthood. Wasn't it at least possible that the conception of these clones was as great an act of love as any other conception? He hoped it was. If he had any goals at all for his children, they were that the clones would in some small way change others' lives for the better, that they would bring people to some sort of understanding about themselves that they would not have had otherwise. If he had a goal for himself, it was that he would be a good father. It might turn out to be his most important accomplishment.

He picked up a journal from the table in front of him and began to leaf through it aimlessly. Gradually he became aware of the fact that a man on the other side of the room was watching him. Paul looked over at the man, trying to remember if he had seen him before on any of his visits. He had, directly or in passing, met or seen most of the people who worked here. Hidey practically lived in the biological sciences building and Paul had spent a lot of time with his friend here even before the clonal project. He couldn't recall the man, but that meant little since he could be a new faculty member or a graduate student.

The man apparently noticed Paul's gaze and began to walk over. Paul immediately felt apprehensive. He scolded himself silently: *what are you afraid of? This business is making you paranoid.* He forced himself to smile at the fellow.

"Hello," said Paul in what he hoped was a jolly voice.

"Hello," said the man. He was a young, handsome and hairy person with blond hair and a thick blond beard. "I hope you don't mind my asking, but aren't you Paul Swenson?"

"Yes, I am."

"I thought so. I recognized you from a photo on one of your books."

"That's pretty good. They always use the same one. I had brown hair, a moustache and was ten pounds thinner. I didn't think anyone could recognize me by that. You've disillusioned me. I thought my grey hair was a pretty good disguise."

"Your face is still the same." The man paused for a moment to light a cigar. "Isn't that something, though. I read this book you wrote, what was it called?"

"I've written fifteen."

"*Studies of the Universe,*" the young man said. "Jesus, I liked that book. I even got that cassette of stellar photographs with your lecture. What little I know about stars, I got from you."

"Thank you," Paul said. He still felt slightly uneasy.

"I didn't expect to see you hanging around here." The man sat down in a chair across from Paul

and crossed his legs.

"I have a couple of good friends in the department of genetics. I think I spend more time here than in my own office. Hidehiko Takamura and I have been friends ever since we were in college and we still spend a lot of time together." Paul suddenly felt as though he had said too much. Something about the man did not fit in with the setting surrounding them; he did not seem to belong there. An idiotic idea, he told himself, who am I to decide who belongs here and who doesn't?

"You must be new around here," said Paul, going on the offensive. "I guess you just arrived in time for the next semester. What's your specialty?"

The blond man looked a bit annoyed. "Oh. I'm waiting for a friend," he said finally, after a long pause.

"Anybody I know? I've met almost everybody around here."

"I don't think so. Well, I just wanted to say I enjoyed your book." The man was standing now. He nodded at Paul, crossed the lounge and sat down next to the windows.

Paul realized that he had almost forgotten what was taking place in the lab while talking to the man. There was no sense sitting there worrying about it in any case since there was nothing he could do at the present time. He pulled some revised lecture notes out of his briefcase and tried to concentrate on them. He would have to lecture

that afternoon and he had not prepared himself as well as he would have liked. A friend at the Komarov Observatory on the moon had sent him some material he was sure would be of interest to the class. He stared at the notes and wondered if he would ever regret not going to the moon, which was rapidly becoming the most interesting place to study astronomy and astrophysics, as well as the most highly selective. He and Eviane had looked forward to going once. She had received an invitation from the radio astronomers there, and those working on the mechanics of a star drive had asked Paul to join them several times. But Eviane became ill just as they were getting ready to leave and after her death Paul didn't have the heart to go.

He now contented himself by trying to keep in close contact with the Lunar scientists, sending them voluminous notes and making expensive phone calls to them when it was necessary. But he would go some day, when the clones were adults and when the Lunar gravity would be a relief to his old bones. It was even possible that one of his children might accompany him.

"Paul?" a voice said. He looked up and recognized Hidey's young colleague, Elijah Jabbar. Jabbar, superficially an impulsive young man who wore gold earrings and affected African dress, was in reality a serious, hardworking biologist whose desire - for perfection exhausted those who worked with



him.

"Everything's fine," said Jabbar, his dark face breaking into a grin. "At least so far."

Paul sighed with relief. "Wonderful," he said, then suddenly remembered the blond man by the windows. He got up quickly and left the room with Jabbar. He stopped outside the lounge and gestured toward the man inside. "Tell me," he said, "Have you ever seen that man around here before?"

"I don't think so," said Jabbar in a low voice. The young biologist pulled at the robe he wore under his lab coat, trying to adjust it. "But you know, he looks familiar. I can't place him, though. I know I've seen him somewhere."

Paul felt somewhat relieved. *I have been getting paranoid*, he thought.

"Is something wrong?"

"I don't think so," Paul replied. "I'm just nervous."

"If it's that guy in there, he's making me a little nervous too, I don't know why." Both men began to walk down the hall. "I still can't place him, but I'd almost bet he's not connected with the university."

The two continued toward the laboratory, and Paul's children.

vi  
"WE'RE PAST the worst already," said Hidey, "at least as far as the chamber is concerned. They've been in there a month already and nothing's happened yet."

Paul stood in front of the ectogenesis chambers. He could

barely see the tiny beings encased in the plastic-like material of the artificial wombs. They were still no more than tiny droplets suspended in fluid.

The chambers were attached to their own power source, a generator down the hall which was being watched twenty-four hours a day by maintenance people on eight-hour shifts. There was an auxiliary generator as well; they were taking no chances on a possible power failure. The maintenance people didn't know why the generator was so crucial, having been told only that it was being used in an important experiment.

Pipes and wires trailed out of the wombs. They were attached to large metal oxygenators which piped in needed nourishment and removed wastes. The blood circulating through the chambers was Paul's, donated for two months prior to the experiment. Paul recalled how doubtful he had been at the time, not really believing, in spite of the blood being drawn from his veins, that the experiment would ever take place. The oxygenator made it possible to recirculate the blood almost indefinitely, and Paul could always supply fresh blood if needed.

On a table in front of the chambers rested a table filled with devices which monitored the life functions of the tiny embryos. Elijah Jabbar sat on a stool in front of the table, watching the various gauges. "I'm a little worried about number six there, Hidey," he said.

"Maybe it's too soon to be sure, but I don't think it's doing as well as the others."

"Why not?"

"It doesn't seem to be developing at the same rate as the others, from what our readings show. That could always change, I guess."

Paul looked at Hidey, who had been momentarily distracted by one of the lab assistants, a tall heavy woman named Nancy Portland. "Here's the new clone-watching schedule," she said, handing a sheet of paper to Hidey, "and we'll be giving the males their androgen next Thursday." Hidey nodded, then turned to Paul. "Don't worry, they're better off in there than they would be in a natural environment. There they would be at the mercy of whatever bad health habits the mother had developed. We're not even allowed to smoke in this room." He sighed. "Not even me. Let's go to someplace a bit more lax, like my office."

As the three men left the lab, Hidey turned toward Jabbar. "Has that story from China been confirmed?"

"Yes," said Jabbar. "They aren't even trying to make a secret out of it." The three entered Hidey's office and sat down.

"They're not cloning," said Paul.

"No," said Jabbar, "but they are using the ectogenesis chamber. They aren't using it on a wide scale yet, just in a few large cities. Their press releases claim that they want to free women from childbirth so they'll have more time to work for

the people. Sounds logical."

"Yet when the moratorium was in effect," Hidey said, "they were quick to say that it was a wise move, since use of certain techniques might weaken and ultimately threaten the well-being of humanity. I guess they can rationalize anything over there." Hidey lit a cigarette. "As far as we know, they're not cloning, but we don't know. No one knows we are either."

"Do you think some others might be trying?" asked Paul.

"Frankly, I'm not sure," Hidey answered. "I suppose somebody could be. This might sound arrogant, but I don't think anyone else is. This laboratory is the most likely place, we have the most talented people in this specialty. We've been cloning animals for longer than any other group in the world. Some others might be planning to clone, but I think it'll take them longer to prepare for the actual experiment."

"What about China?" asked Paul. "After all, the first workable artificial womb was constructed by Huang Tsu."

"I don't think they'd be as likely to clone anyone," said Jabbar. "The Chinese have assumed up to now that it is environment that makes a person what he is. Their collective society is designed to form a certain kind of human being. They wouldn't be likely to practice any sort of genetic engineering."

"Who knows?" Hidey said. "They might, just to demonstrate

their point, that it doesn't matter."

"Well," said Paul, "I'd better get going. I have an appointment to interview a young couple at my house. I'll be by tomorrow."

"Sure," said Hidey. "I'll see you."

Paul left the office and walked down the hall toward the lobby of the building. He had not brought his car as his house was close enough to the campus to walk. Paul enjoyed walking, listening to the snow crunch under his boots and breathing the cold clean air. As he stopped near the door to adjust his coat something caught his eye. He turned his head slightly.

The tall blond man, the same man Paul had met in the faculty lounge a month earlier, was standing near a display case. The man glanced at Paul and nodded. He nodded back, then hurried out the door.

Once again, not sure why, he wondered what the man was doing there.

vii

**P**AUL HUNG UP the two coats in the closet near the stairs, then wandered back into the living room. The couple seated on his over-stuffed sofa were a study in contrasts. The young woman was short and stocky with a broad friendly face and straight black hair. Her husband was a tall bony brown-haired fellow with pale grey eyes. He looked almost morose, but then Paul noticed the crinkles around his eyes and the smile lines near his

mouth.

Paul settled into an easy chair across the room from the couple. "I'm Bill Hathaway," the man said, "and this is my wife Zuni."

"Except I'm Apache, not Zuni," the young woman said. "That's just what everyone calls me."

Paul had read their resume the day before. It was almost faultless. Both Hathaways had worked in the child-care center in the Alasand ar-cology for almost five years after graduating from college. Recommendations from their co-workers and friends had stressed the couple's friendliness, love of children and ability to work hard. They had apparently decided to return to school for degrees in linguistics and wanted work nearer the campus. They would be studying during alternate semesters, so their studies would not interfere with their work.

So far, so good. Paul wasn't satisfied with the previous applicants he had interviewed. One couple had interest but no experience, another couple had experience but had looked dubious about caring for children whom Paul suggested might have "special problems". The third couple had been somewhat nervous, and the man had suggested that he would be willing to let his wife handle most of the drudgery and be content with giving orders.

"You already know," Paul said, "something about this job. You'll be caring for six infants for three or four years while living in this house.

Of course, you'll get time off and a vacation each year, and I'll want the kids to spend some time in the university day-care center to get used to other children. But most of the time you'll be full-time parents, along with me. You might get tired of it after a while."

"I doubt it," said Bill. "If we thought so, we wouldn't be here. We like kids, and it'll take us about four years to finish our degrees anyway. We would have had our own by now, but I'm sterile and we've been turned down for artificial insemination—the waiting lists are too long." Bill said this quite openly and apparently without shame. The man didn't shy away from unpleasant facts, and Paul liked that. The clones, if they were anything like Paul had been, would be inquisitive and would not take well to having their questions ignored or pushed aside. "Eventually, we'll adopt," Bill went on, "but you know how long that takes. When we heard about your job offer, it sounded ideal."

"I won't be able to pay you as much as you're getting now," said Paul.

"We're not in it for the money," said Zuni. "If we were interested in that, we would have gone into child care administration a long time ago. We happen to like working with kids."

"All sorts of kids, I trust," Paul said cautiously. "Even children who might have special problems?" He watched the faces of the couple in front of him carefully. Bill's grey

eyes and Zuni's black ones stared back at him steadily.

"Don't all children have special problems of some sort?" Bill replied. "We've cared for crippled kids, emotionally disturbed kids, retarded kids and kids that throw temper tantrums every five minutes."

"I expected you might want a couple to care for kids with 'special problems', as you put it," said Zuni. "I mean, six infants all at once, it is a little unusual." Paul realized that the pair were drawing some tentative conclusions about him at the same time as he was trying to judge them.

"What sort of problems," said Paul quickly, "did you think they might have?" The question was a shot in the dark, a way of finding out just what the Hathaways might be thinking.

"We don't know," said Bill. "At one point I thought they might be the fruit of several affairs, believe it or not, or that you had somehow defied bureaucracy and managed to adopt some African war orphans. Then Zuni had what I thought was a wild idea at first, but it began to seem more plausible after a while."

"What idea was that?" asked Paul.

"The moratorium on genetic engineering has run out," Zuni said softly. Paul's muscles tensed and he could feel himself beginning to sweat. "I know you don't work in that area, but friends of ours at the university know people who do. They told us once, just in passing,

that you had some close friends there. So I thought . . . it is a pretty wild idea . . . I thought maybe you might have offered to help raise some experimental subjects."

Paul managed to restrain himself from gasping aloud. He was dealing with an intuitive and intelligent couple who had come uncomfortably close to the truth. He began to wonder how many others might have reached the same conclusions.

"But that was just a crazy idea," Zuni went on. *I'd better say something*, Paul thought to himself. "We shouldn't be speculating about it when you can fill us in on the facts."

"We still want the job," said Bill, "but I don't think it's fair to you to say we'll definitely take it until we know more about what's involved. It's easy to say you're willing to do anything when you're in ignorance about what's going on: I doubt that we would turn it down in any case, but we should know more." Zuni was nodding her head in agreement.

"I'll be as honest as I can," said Paul, deciding to take a calculated risk. "Zuni's on the right track, but I can't tell you any more than that, at least not right now. First, I have to send you to a friend of mine for psychological testing. I hope you're not offended by that—to be honest, I get a good feeling from you two, but we can't afford to take chances. I need as much objective evidence as possible that you two are right for this job."

"You're being sensible," Bill said. "Personally, I don't think you'll find much wrong, but no one knows everything about himself."

"We'll keep the results confidential, of course," Paul said, "and I trust you'll do the same with what I've told you. I promise to fill you in as soon as the psychological testing is over, assuming the results are favorable."

"You can trust us," said Zuni, "but you must know there are others, not many but a few, who are drawing the same conclusions about what's going on in the biological laboratories."

Paul considered this, and began to feel even more worried than usual. How would people react when they knew? Again he started to fear for his unborn children.

#### viii

PAUL FELT a twinge of guilt as he hurried through the spring rain to the lab. He had been gone almost a month, visiting his sister Sonia in New York and giving a couple of seminars at Columbia. The seminars went well, although Paul was a little unnerved by the sight of armed guards in the lecture halls and around the periphery of the campus. He had not been greatly calmed when he was told that things had been fairly quiet since the New Year. The scars of New Year's Eve were still apparent: partially burned buildings, broken windows, ruined offices and hallways.

Sonia at least looked well. She

had divorced her second husband six months before, but it had been an amiable divorce and the two still worked together for a firm that specialized in providing taped lectures to computer complexes at universities all over the world. It had dismayed Sonia more when her teenaged son Jerry chose to exercise his legal rights and left with her husband. Jerry visited her frequently and usually spent his weekends at her apartment, but she had been hurt by his action.

Paul ducked into the doorway of the biological sciences building and strode through the lobby. He was glad to be back. Hidey had encouraged him to go on the trip to New York, thinking the change would do him good. Paul worried about leaving while his offspring were still gestating, but Hidey pointed out, quite reasonably, that there was really nothing for him to do until they were born. "You'll be tied down then," Hidey had said. "Right now you're not, and you said your students have all those taped lectures by other professors to keep them busy. You'd better visit your sister now while you've got the chance."

Paul was thinking now that he had overstayed his welcome at Sonia's. Things had been fine for the first two weeks, and then Sonia began to reminisce about her marriages. "I tried twice," she had said, "once when I was young and foolish and again when I was older and more stable, and I have never found what you had with Eviane."

Paul had mumbled something about it not being too late, she still had a good chance, and so on. But privately he doubted it, and wondered whether or not it would be a good thing if she did. He had felt like half a man for too long now, feeling that he should have kept part of himself from Eviane so that he could have survived her death with something whole. They had shared everything, their work, their free time together, all of their feelings, and with her death he had lost part of all he had. The doubts he once had about the cloning experiment returned now, the notion that he had agreed to take part in it for neurotic reasons of his own, to assuage the loneliness which was his constant companion.

"Did you get my message, Paul?" said Emma Valois. She was standing in the doorway of Hidey's office, arms folded across her chest. "I taped it on your phone."

"No, I didn't." They entered the office and sat down. "I should have checked, but I was tired when I got in last night."

"Well, it looks good on the Hathaways. They're so well adjusted they make me feel unbalanced." Emma crossed her legs and tugged at her dark green slacks. "I don't know how many others you talked to, but I'd wager a year's salary on the Hathaways. I can't be specific about anything without violating their confidence, but I'd hire them in a minute to look after my kids, and they're a handful sometimes, believe me."



"Good, at least that's one less problem for me. I just hope they take the job. Where's Hidey?"

"He just went to the lab to check on things. I've been trying to convince him he needs more for breakfast than coffee and a cigarette, maybe you can . . ."

"Paul." Hidey was at the door, his face anxious. "Come to the lab, we've got trouble." Hidey disappeared down the hall. Paul rose from his seat and followed him, with Emma close behind.

As he entered the lab, he could see Nancy Portland and a male assistant cowering near the wall by the door. On the other side of the room near the chambers, Elijah Jabbar was holding the shoulders of a small pale man. "I ought to punch your face in," Jabbar was shouting as he shook the man. "You stupid son of a bitch, I'll see you blacklisted at every lab in the country."

Hidey began to pull at Jabbar's arm. "Come on, Eli," he pleaded, "that's not going to help us now. Let him go."

"What happened?" asked Paul, hurrying toward the three men.

Jabbar released the small man. "Tell him, Hidey." Hidey turned and looked up at Paul.

"It's one of the clones, Paul." Hidey seemed to be saying the words only with great difficulty. "The umbilical, well, it got clogged somehow, we're still not sure how. Johnson here was on night duty, he should have noticed it right away and taken emergency measures,

spliced in a new section of tubing."

"He was asleep," said Jabbar. "Nancy found him when she came in this morning. The bastard was asleep."

"It was a mistake," the man named Johnson protested. "It could happen to anybody. I only dozed off for a couple of minutes, it seemed like, and then when Nancy came in, we hurried as fast as we could with a new tube . . ."

"A couple of minutes," shouted Jabbar. "You must have slept half the goddamn night away."

"Which one?" asked Paul. He felt stunned, as if someone had just hit him in the stomach. "Which one?"

"Number six," said Hidey. "The female we were a little worried about." He pulled out his cigarettes and lit one, apparently oblivious to restrictions. No one stopped him.

"Is she all right? Is she going to be all right?"

Jabbar turned away from Johnson. "No," he said. "I checked the gauges. That fetus was deprived of oxygen for quite a while, it's been damaged. It's barely alive now."

"She's still alive then." Paul wiped his face with his sleeve. He wandered over to the side of the sixth chamber and stared at the tiny fetus. It seemed defenseless, curled up in its womb.

"With brain damage," said Hidey. "I think it's dying now, Paul, and even if it doesn't, it won't be normal."

"At least she's alive," said Paul.

"Paul, are you listening to me?"

Hidey was at his side, holding his arm. "We have to make a decision. Do you want this fetus to survive in that state? Wouldn't it be more merciful not to allow it to? You're going to have plenty of problems as it is. I think we should abort."

"No."

"Paul, consider the child, what things will be like for her."

"No."

Johnson was wringing his hands. "I'm sorry, Dr. Swenson," he said. "It was an accident."

Paul turned away from the ectogenesis chambers and stared at the pale laboratory walls. He was acting unreasonably, he knew that. This was an experiment and he knew there would be risks and possibly mistakes. There were problems enough with natural children. It would be nothing more than an abortion. Yet he felt a sense of loss.

"I'm sorry," muttered Johnson.

"It's settled," Jabbar suddenly said. His deep voice drummed at Paul's ears. "It's dead. No life functions."

Paul turned back to Hidey and could think of nothing to say.

"I'll take care of things here," said Jabbar. "Why don't you two go back to the office."

"Stay here, Johnson," Hidey said, "I'll talk to you later." Paul left with his friend, joining Emma at the doorway of the laboratory. She said nothing, quietly following them back to Hidey's office.

When they were seated, Hidey pulled a bottle from his desk. "Have some whiskey, Paul, you'll

feel better."

"No thanks." Hidey poured some for himself and Emma. "I'm not really that depressed, Hidey, but I can't help feeling a little sad about the whole business. Number six. She didn't even have a name. I guess she'll just go down the chute with all the other failed experiments."

"Come on, Paul, you know we're not that callous. She'll go to the crematorium and we can bury her ashes somewhere if you like. I've been working with life for too long now not to feel a lot of respect for it, or sorrow when it dies, in whatever form." Hidey drummed at his desk top with his fingers. "God, how I hate death. This may be the first step in a battle against it, preserving your genetic traits in these clones. Someday maybe we'll beat death altogether, and I hope we're all around to see it. That fetus didn't die for nothing, Paul."

"I know," said Paul.

"Considering the circumstances, I guess it's just as well." He wondered how the other clones would feel when they learned about the death of their sister, as they were bound to some day. They might regard it as a sad accident, or they might react with horror. There was no way to know how it would affect them.

"Now I've got another problem." Hidey dragged thoughtfully on his cigarette. "That idiot Johnson. If I can keep Eli from committing homicide, I have to keep Johnson around until we release this story. If

we fire him now, he may start talking. I've got to convince him that we won't and give him something innocuous to do until I can bounce him out of here." Hidey sighed. "I just hope he buys it, that's all."

"And we've got to tell the Hathaways about the clones," said Emma. "I think we can trust them, though. We'd better do it soon, in case they have second thoughts about your offer, Paul."

"I'll tell them," said Paul, thinking about how they might react to the news.

ix

"THAT'S EVERYTHING, up to this point," said Paul. He had invited the Hathaways to the house for dinner, but had eaten almost nothing himself while relating the story. Now he stared at his still full plate, hesitating to look at them. Finally he forced his head up. He had left out nothing, not even the fate of the sixth clone.

Zuni was sipping her wine. She put the glass down and raised her head: "It sounds," said Zuni, "as though you want us to take care of identical quintuplets. It's about the same thing, isn't it?"

"There have never been any identical quintuplets as far as I know," said Bill. "Twins, yes, but . . ."

"And they'll be like you," she interrupted.

"There's no doubt about that," said Paul. "I'm the only parent, after all."

"That doesn't sound so bad,"

said Bill. "You're a nice fellow, Paul. -I imagine the kids will be asking questions all the time when they're not being quiet and thoughtful, and doing quadratic equations by the time they're four. And they'll be good cooks too. That was a great dinner." He patted his stomach.

"And," said Zuni, "you'll want us to treat them as individuals, not just as a group."

"How," asked Paul, "did you know that?"

"I had two friends once who were twins. In fact, that's what people called them, the O'Hara twins, never Mary and Molly. Their mother used to dress them in identical outfits, the whole business. They got to resent it after a while, but they were very dependent on each other too. It'll be a thousand times worse with your kids, they'll be just like you as well as each other, and people are bound to make comparisons. They won't even be mirror images of each other, the way twins are. They'll be completely identical." She smiled slightly. "You want to be sure that each one has a sense of being a person in his own right."

"You sound," said Paul carefully, "as if you've already taken the job."

"Of course," said Bill. "We're looking forward to it, and to meeting the kids as well."

Paul felt relieved. Maybe things were not going to be as bad as he thought. Zuni and Bill hadn't found anything to fear in the idea of

clones. On the other hand, he thought pessimistically, how many people were like the Hathaways? He had been lucky to find them at all.

"By the way," said Zuni, "when do we meet them?"

"In the middle of September," Paul answered, "if everything goes as planned."

"No reason to think it won't," said Bill. "An artificial womb isn't going to have labor pains in the middle of the night."

x

**P**AUL STOOD on his front porch, surveying the lawn. His house stood at the top of a small hill and at the end of the road leading past his neighbors' houses. The small suburban neighborhood was beginning to look a bit run down. Many people were moving into arcologies like Alasand, where they could live in houses on the various levels and yet be within walking distance of whatever they needed. Some had moved back to the city, which was almost pleasant without cars roaring through the streets. But Paul had grown used to the house. It was almost surrounded on three sides by wooded land; since suburbs were becoming unprofitable, a lot of land that would have been developed was reverting to its natural state.

Bill and Zuni had decided to move into Paul's house at the beginning of June and he had readily agreed. It would give them time to feel at home in the house and, more

importantly, feel at home with him. The Hathaways still worked at Alasand on weekends, but would quit their jobs there in August, take a vacation, and then begin their new job with the clones.

They had brought surprisingly little with them when they moved in. They owned few books, having access to whatever materials they might need through the "learning booth" computer linkup that almost every home had. Paul owned two booths, and would probably get a third when the clones were older, but he also owned about three thousand books in paperback and hard covers. The Hathaways, as did many people, purchased microfiche copies of those they wanted to keep and read them on portable readers. Paul was old-fashioned, and still found pleasure in holding a book in his hands, in the smell of old print and paper.

Zuni and Bill had quickly settled in one of the upstairs bedrooms down the hall from Paul's room. Almost immediately, Zuni decided to paint the two rooms which would serve as nurseries for the clones. Luckily, the house was big enough so that by the time the children started school, and the Hathaways moved out, each clone could have a separate bedroom. Paul could easily make room for the things in his study in his bedroom, and two other rooms had been used for guests. Eviane had insisted on a large house. She had lived in apartments all her life and had wanted room to sprawl.

The weather was warm and sunny. Gentle summer breezes ruffled Paul's hair as he stood on the porch: Billowy white clouds sailed across the clear blue sky. Zuni was upstairs, busily painting walls, hoping to finish the rooms before the end of June, when the weather would become hot, humid and "lazy-making", as she put it. She had also managed to buy five used cribs from the Alasand child-care center. Paul had been ready to buy new ones, but Zuni had persuaded him that would be a waste of money. Instead, she got new mattresses for the cribs, painted each crib a different color, and made toys out of old beads and wooden objects that could be attached to the cribs. These, she explained, would help the children develop their perceptual abilities. She had also insisted on installing a sound system in each nursery, after telling Paul of the marvelous results they had at Alasand when classical music was played for the children. "We have to stimulate them," she told Paul. "We have to encourage them to explore with all their senses. We already know that music can work as an anti-depressant and we think it helps the children in understanding mathematical concepts. It might make them smarter, believe it or not." As it turned out, Paul had saved little money on the used cribs after purchasing the sound system.

Bill was puttering around on the lawn mower in the front yard. He turned slightly in his seat and

waved at Paul. "Hey," he shouted, "how about joining me with a cold beer?"

"Okay," Paul shouted back.

"I'll be done in a couple of minutes."

Paul headed back inside and went through the living room to the kitchen. He rummaged in the refrigerator for the beer. He was surprised at how easily he had adjusted to having the couple in his home. There were no arguments about how to handle things around the house. They had quickly settled into a routine, each taking on different household tasks in turn. It was good to hear voices in the house again, voices that managed to take his mind off the spirit of Eviane that he often felt was lingering in the rooms.

Bill was already on the porch when he returned, seated in the wooden rocking chair he had appropriated since moving in. Paul handed Bill his beer and sat in the plastic lounge chair next to him.

"That tastes good," said Bill, taking a swig. "I'd better relax while I can. Zuni'll be ready for the second room soon and she needs me to paint the ceiling."

"You two are working pretty hard already, you're going to be worn out by the time the kids arrive."

"Don't worry, when we're done, you're welcome to polish the floors and move in the cribs while we relax." Bill swallowed more beer. "Paul," he went on, suddenly sounding serious, "I don't want to

alarm you, but there's something bothering me."

"What is it?"

"Maybe it's nothing. When Zuni was visiting our friend Alice at Alasand yesterday, she ran into this fellow, well, she didn't run into him exactly. She thought for a while he was following her. Then she got annoyed, turned around, walked up to the guy, and asked him if he was looking for something. He gave her some story about looking for a friend and losing his way. But then he started to pump her, began to ask a lot of questions. It seemed innocuous at first, she thought maybe he was trying to pick her up or something, but then he mentioned you."

Paul was startled. "What did he say?"

"Not much at first. He said he heard we were working for you and he wondered why, since he knew we were working at the child care center. He turned out to know a lot about us. He gave her a lot of talk about what a great fellow you were, how he read one of your books once and so on. She was ready to tell him off, but she controlled herself and said you'd hired us for some editorial work. It's a clumsy story, I guess, but our friends bought it. She said this guy looked like he knew it was a lie."

"Look, Bill, he could just be a nosy guy."

"That's what I thought at first, but then Zuni described him to me. I know this sounds weird, but I could swear he was a man I saw

hanging around the biological sciences building the day Zuni and I went to meet Dr. Takamura and Dr. Jabbar. I wouldn't have remembered him except that I could swear I saw him driving around this neighborhood the same damn day."

"Couldn't Zuni tell you if it was the same man?"

"No. She didn't see him the day we went to the lab. Dr. Takamura's coffee machine wasn't working and I went to the lounge to get some. I saw the guy lurking at the end of the hall."

"What did he look like?" Paul asked, suspecting he already knew the answer.

"A tall blond man, good-looking, with a lot of hair and a thick beard."

"I've seen him," said Paul, "intermittently. I thought maybe he was seeing one of the women students or something. I always had the feeling he was nosing around, but I thought I was getting paranoid."

"Maybe he is looking around, but if he knew anything, you probably would have heard about it by now. It could be just chance."

"Maybe."

"How are the clones coming along?"

"Great. Eli says they should be very healthy kids."

"Good." Bill was silent for a few seconds, then went on. "Maybe. I shouldn't tell you this, Paul, but I think I can be frank with you. I've been thinking a lot about cloning lately, and suddenly I realized that

if it works, if the kids turn out to be normal, it means I could have my own kids."

"You're assuming," said Paul, "that there won't be any restrictions, that anybody would be allowed to clone and that facilities would be available."

"That's not the point. Let me see if I can explain it. I've known I was sterile ever since my teens. Frankly, it didn't really bother me much, it didn't affect my virility, I knew that, and I grew up in a family where my brother and sister were adopted. I adjusted to the fact that I would never have a child that was physically mine, whether we had artificial insemination or adopted or did both. But now . . ." Bill paused for a moment. "Now I know that theoretically at least I could have my own child. I don't know how to explain it, but it started to matter to me. I honestly never thought it would. I know logically that it's extremely doubtful I would ever be cloned, but emotionally . . ." Bill stopped.

"Do you think it's going to bother you, Bill, being in this house with clones?"

"If I thought it would, I wouldn't be here now—it wouldn't be fair to you. But I did go to see Dr. Valois about it. She told me pretty much the same thing you did, said she thought new restrictions would probably be put in effect by somebody. She told me that eventually I would accept the fact and realize it wasn't really possible for me to have a child, I had lived with it

before and would again. It might just take a little while." Bill finished his beer and placed the bottle next to his chair. "She's probably right. I don't resent you or anything, if that's what you're thinking. She asked me if I wanted to stay, I told her I did, and she said I should."

"I think you should too. And I'm glad you felt free enough to . . ."

The phone was buzzing inside. Paul got up and hurried into the house. He picked up the receiver in the living room and saw Hidey's face on the small screen.

"We've got trouble," said Hidey, before Paul could open his mouth. "I have a visitor here with me."

Paul's mind was racing ahead of him. *I know*, he thought wildly, *I know*. His mind was starting to add things up and he felt that what Hidey told him now would be no surprise.

"Who is it, Hidey?"

"His name is Mort Jason and he's a big blond bruiser who works for the International Newsfax Service as a reporter. He knows. I hope you can get here fast."

x

THE TALL BLOND MAN was the first person Paul noticed as he walked into Hidey's office. He had driven over as fast as he could, not bothering to change. Now he felt suddenly ill at ease in his stained work slacks and denim shirt.

Emma and Elijah Jabbar were in the office too, seated over by the left wall. The office was grey with cigarette smoke, some of it the



reporter's but most of it, Paul was sure, Hidey's. His friend looked worn and nervous. He glanced at Emma and Jabbar. Emma's eyes glittered and Jabbar's face was an obsidian carving.

Jason was apparently a pacer. He was not seated but was slowly wandering from one side of the room to the other, a model of good grooming in his sleeveless blue shirt and pale lace-covered slacks. Paul closed the door and took the one remaining seat.

"Hello, Dr. Swenson," said Jason. "I should tell you what I just told your friends. I found out about your little experiment. I know what's going on. I can't divulge my source, needless to say, but I filled Dr. Takamura in on what I found out, so he knows I'm not bluffing."

"We know who the son of a bitch was," said Jabbar suddenly. "He admitted it to me before I came in here. I hope you paid Johnson plenty—he'll never work in a bio lab again if I can help it." Emma put a hand on Jabbar's arm and his mouth clamped shut.

"Why are you talking to us then if you've got your story?" Paul asked. Mort Jason stopped pacing and leaned against the door.

"I pride myself on *some* sense of responsibility," said the reporter. "Now I could go and do a scary story on Paul Swenson, the Nobel laureate who is so obsessed with his own greatness that he wants to give the world copies of himself, and all the mad scientists here who are tampering with the laws of nature

and who don't believe every person born should be a unique individual, and about fetuses dying in the lab, that sort of thing. But, I don't like that kind of trash. They had it thirty years ago, scary stuff, and we wound up with a moratorium. I like to think I'm a responsible journalist. I like to inform people, not scare the shit out of them. I want your cooperation, but I should tell you that whether I get it or not I'll do a story, and right away. Others are sniffing around. A few of us thought something might be going on around here when the moratorium ran out, it seemed a likely spot, although I did check some others. I want this story, and I want to do it before any of my journalistic brethren get wise."

"Just what sort of story do you want?" asked Hidey.

Jason smiled slightly. "What I'd like is an interview with you people, pointing out why you're doing this, what you hope to find out, what motivated you. You could tell me how you went about the experiment and I could try to simplify things for the general public. It could be a sympathetic piece, a nice feature story in addition to being headline news. Or you can refuse to talk to me and I might have to start speculating about what you're trying to hide."

"Sounds like blackmail to me," Jabbar said grimly.

"What are you trying to hide?" said Jason. "You knew you couldn't hide it forever. I'm willing to de-emphasize certain un-

pleasantries, like that one fetus that died. Accidents can happen, and normal mothers miscarry all the time, there's no point in playing it up."

Jabbar and Hidey both looked ready to say something at this point, but Paul motioned to them with his hand. "Listen," Paul said, "we're not trying to hide anything. We intended to announce this procedure as soon as we were ready and we were afraid, I'll admit, of announcing it prematurely. We might have been stopped if we had revealed our intentions before starting. Even if we had announced it before going ahead, we might have been forced to abort the experiment. It would have been no different from aborting a pregnancy."

"I'll grant you that," said the reporter, "but no one's going to do that now. They're too far along. With modern techniques they could survive outside those womb things if you removed them right now."

"Please let me finish," said Paul. "There's more at issue here than that. Those children in there may eventually suffer from any premature publicity—surely you realize that. Look at what's happened in the past to quintuplets, who are a natural if infrequent occurrence. What kind of beginning will it be for them if they're exposed to unrestricted publicity? They'll have problems enough."

"You certainly do sound like the outraged parent," Jason said smoothly. "You can't hide it

forever, Dr. Swenson. If I break the story now, some of the excitement will have worn off by the time you bring those kids into the world. They might have less trouble then. And to be honest, I think you might prefer dealing with me rather than some of my professional colleagues. I've always thought this moratorium business was like hiding your head in the sand. I'm somewhat sympathetic to what scientists are trying to do. I can't say the same for some others." Jason paused to light a cigarette. "I don't want to brag," he continued, "but my name has some influence and I am presently negotiating with my employers for a daily column and a weekly program of interviews and commentary on one of the networks. I could be an influential friend. Or I could be a thorn in your side."

"You don't leave us much of a choice," muttered Hidey. "I guess this was bound to happen." He leaned over his desk and rested his head on his arms. "Could you give us an hour or two to discuss this?"

"Certainly," said Jason. He turned and opened the door. "I'll be back around three. And please don't call any other reporters. It'll gain you nothing but a momentary revenge, and make me forget my principles about responsible journalism." He left the office.

Emma looked around at the others. "How the hell," she said, "are we going to get ready for an interview in that length of time?"

"You sound," said Jabbar, "as if

we're going to talk to that guy."

"We have to, Eli," Hidey said. "We have to make the best of this, not make matters worse. Unless one of you can figure out a way to commit the perfect murder."

"I'd be happy to volunteer," said Jabbar, but he sounded resigned as he said it.

"Look, it could be worse," Paul said. "We'll play up the positive aspects of this, dwell on Hidey's motives, concentrate on his sense of responsibility and his hope that this is a positive accomplishment and not just a capricious scientific adventure."

"Maybe it is," Hidey said glumly. "Maybe I was just too impatient for fame after being restricted for so long. I'll be famous, all right, and for what? A number of others could have done it with a little effort. The techniques were already there, I didn't invent them, just refined them a bit in my work with animals. I just took the next logical step, the one everyone else was afraid to make."

"Oh, Hidey," said Emma. "Don't start now. All we need is for that Jason to think you're loaded with doubts yourself."

Hidey looked up and Paul could see that his friend was pulling himself together. "There's one thing I have to do now," said Hidey. "I'm going to call the Chancellor and ask for some campus security people around here."

"Do you really think that's necessary?" asked Paul.

"Paul, my friend, we'll be lucky if we don't have to call in state police and the Army."

xii

THE WINDOWS in the faculty lounge were broken and had not yet been repaired. The sultry July heat was penetrating the building as the air cooling system, unable to contend with various shattered windows, had finally broken down temporarily. As he entered the lounge, Paul felt grateful at least that the laboratory which held the clones had no windows. The greenhouse had suffered most from the disorders that had erupted around the building intermittently in the past three weeks, and the botanists were not quite as friendly to the geneticists as they once had been.

Jon Aschenbach was sitting in the lounge, in a chair near the wall furthest from the windows. Jon had called him that afternoon, asking calmly if Paul was free for dinner. "I know a nice place out past Alasand," Jon had said, "with good home style Italian cooking."

"I don't know, Jon. I've been a little worried about going anywhere lately." Mort Jason had kept his word about his treatment of the story, but many of his colleagues had not been so merciful. Some of the news reports had been almost lurid, and the reporters had done an excellent job of locating other geneticists who were disturbed by Hidey's actions and willing to be quoted, usually out of context. A group of outraged citizens had

called for the resignation of Hidey and all those involved in the project with him from the university. One of the state's senators had flown in from Washington and announced that he would introduce a bill that would ban cloning and other biological experimentation with human germ plasm in the United States, a wise move for a senator who was running for re-election.

"Don't worry about it, Paul," Jon went on. "It's a small place with dim lighting and the proprietor is a friend of mine. We can go in my car."

Paul had finally agreed, grateful to Jon whose friendship, he felt, was being strained to the limit. Jon was still not reconciled to the project, and it could do him no good to be seen with one of its principals. Yet he had been one of the first to call on Hidey and Paul when the story broke, as well as doing nothing to interfere with the project when they had decided to go ahead.

Jon stood up as Paul entered the lounge. "You look tired," he said.

"You should see Hidey," said Paul. "He's got his hands full, watching over the kids and trying to save his job at the same time."

"He told me the Chancellor would fight for him."

"The Chancellor can only do so much before they start going after his hide as well. He'll back down then. He's pretty mad at Hidey and Eli himself but he doesn't want to lose the whole genetics department and that's what'll happen if he doesn't at least try to fight for

them."

"You sound as though he doesn't have a chance, Paul."

"He has a small one. He talked to Jenny Berg today. She's the head of the Sciences Division here and she's sympathetic." The two men walked out into the hall and ambled toward one of the side exits. "She's going to ask that Hidey and Eli be suspended for a couple of years for misuse of funds or some such administrative reason. The rest of the group would get off with notations on their records. I told Jenny I would resign too."

"There's no reason for you to do that, Paul."

"Yes, there is. They're my clones. I don't need the university's money anyway, my royalties and those investments Eviane made will see me through with a little management. Besides, I always thought I was better at writing than teaching."

"And you think your resignation might take some of the pressure off Hidey." Jon pushed open the door leading outside. "You're not fooling me, Paul. I know you enjoy teaching."

Two soldiers were standing near the door. They glanced at Paul and Jon briefly. Paul felt uncomfortable, partly because he was not used to having soldiers in such an unlikely place and partly because he could sense their hostility. They would do their job, but he had learned from overheard snatches of conversation among them that they were no happier with the cloning project than the general public was.

They had guarded his house as well until a week ago. The police still had the house under surveillance. Paul had felt curiously vulnerable sitting in the house with guards stationed outside, trying to adjust to the fact that people might want to harm him. At least Zuni and Bill had stayed. He had worried that they might want to protect themselves by leaving, but they stayed after all. The Hathaways were generally ignored in the news stories, at least so far, but Paul was sure they would be spotlighted when the reporters began to look for a new angle.

"I had to park under the anthropology building," said Jon, gesturing at the square glassy building next to the biological sciences structure. "They won't let a car near Hidey's labs." They entered the building and took an elevator down to the underground parking lot. Jon had parked near the exit, and they were soon driving up the ramp and outside.

There was an entrance to the automated highway on the edge of the campus, past the athletic fields. Cars were already in line at the ramp and the highway was growing thick with rush hour traffic. There was talk of extending train service to the areas near the university and plans were being drawn up for the route. The automated highway was becoming crowded with local traffic.

Jon punched out his destination and waited for the controls to guide him onto the highway. Paul leaned

back in his seat and sighed. "It's unnerving to see the military on a campus," he said. "It takes me back to my undergraduate days, except then I was afraid they might shoot me. Now they have non-lethal weapons and they're protecting me." Paul turned toward his friend. "I don't mind about myself, or even about Hidey and Eli, but I can't accept the fact that someone might try to harm the kids."

"They don't view them as kids right now, Paul, just as something to fear. Some of the stories I've seen talk about mass minds, or mental telepathy among clones. One even said they would be condemned to doing the same things at the same time. Maybe when they're born people will regard them differently."

"Will they, Jon? I'm not so sure."

The car was guided around the ramp, then shot forward onto the highway. Paul drummed absently on his safety belt, accidentally releasing it. The car buzzed angrily at him and he quickly fastened it again.

"Look at it this way, Paul," said Jon. "It could have been worse, someone might have tried to burn the lab down or bomb it. All you really got were a few disorderly citizens and some rocks through the windows."

"And a few nasty phone calls. I had to change my number."

"And a few students who come by now and then with signs. Think about what could have happened.

People still remember how violent New Year's was, a disorderly end to a disorderly century. Most people are quietly fearful now. They'll give you a hard time, and I don't doubt they'll pass a law restricting such things in the future. Maybe they'll nail poor Hidey, although I hope not. But after all that, they'll console themselves with the thought that at least it won't happen again."

"You're probably right, Jon." Paul started to relax. "And I've been feeling a little too sorry for myself lately. Right now Hidey's the one who needs sympathy. On top of everything else, he got a call from one of his old professors. The man was cursing at him, saying he'd ruined things for every other biologist. Apparently this man thinks that if Hidey had waited and just let the moratorium expire, people in biological research could have taken time to educate the public, get them used to the idea of possible experiments. He wanted to get a public relations campaign going that would point out possible benefits of genetic research that was carefully controlled."

"The man might be right, Paul. You do have to consider the society around you—science doesn't work in a vacuum, figuratively speaking. What did Hidey say?"

"He exploded. He said that if science had to wait for a consensus every time something new was tried, we'd still be living in trees and eating raw meat."

"I wouldn't have expected such

an oversimplification from Hidey, Paul. Surely he realizes that a scientist could accomplish little without some support from the society around him. How much did Leonardo da Vinci really do with his ideas? Renaissance Italy wasn't ready for them. And the society has a lot to do with how science is used, as you've heard a thousand times."

"Funny you should say that, Jon," said Paul. "Hidey said pretty much the same thing once he was off the phone and calmed down. But he also said it's both the gift, and the curse, of the scientist that, regardless of those considerations, he keeps trying new things and looking for new answers. He can't help it and sometimes it's almost a compulsion. You found your answer, Jon, so you left science. Hidey and I are still looking."

Paul could see Alasand in the distance now. The arcology was a large hexagonal latticework, narrow at the top and bottom and wide across the middle. It was surrounded by forests over which it towered. A million people lived in Alasand or owned businesses there. They had the advantages of city life while living in individually owned houses near wilderness. The houses, unlike those in the older suburbs, were of varied sizes, shapes and styles. As Alasand glittered in the sunlight, it resembled a giant's abandoned toy. The traffic began to thin out a little as cars were guided off the highway toward the arcology.

"Sometimes," Paul went on, "I

think we're all born scientists. When we're children, we always explore, asking a lot of questions and trying different things to see if they work. But we get it knocked out of us. It's our most natural impulse, and so many grow up to hate it."

Suddenly the car began to slow down. It came to a stop quickly and Paul could feel his belt holding him as he moved forward, then fell back.

The cars around them had stopped too. Paul looked over at the part of the highway going in the opposite direction. The cars there had halted also.

"I think we're going to be late for dinner," said Jon. "I hope it doesn't take them too long to make repairs."

There was nothing to do but wait in the car, which could not be driven manually while still on the highway. It was dangerous to get out since traffic could start moving again at any time. "This is the first time," said Paul, "I ever heard of the highway breaking down."

"Everything seems to, sooner or later," Jon muttered. The car's air cooling system had stopped functioning also. Paul leaned over and rolled down his window.

"Hey, mister." A burly-looking man in the car on Paul's right was leaning out his window. The man had apparently removed his belt and harness. "You know what the hell's happening?"

"Probably a computer failure," said Paul. "About all we can do is wait." He didn't tell the man it

might take a while. Modern transportation systems rarely suffered breakdowns and were doubtless more efficient than their predecessors. But if the repairs needed were complex, and they usually were, specialists would have to be rushed to the source of the problem and would have to take their time repairing it. Repairs at least were a more complicated process.

The people in the car on Paul's left began to honk their horn. Paul glanced at them and saw that the car had five teenagers in it. One of them opened a door and stepped out onto the highway. He was a tall boy, dressed only in a pair of green shorts. He stumbled a bit as he came closer to Jon's car.

"Get back in your car," Jon shouted at the boy. "It's dangerous, standing out there."

The boy peered into the car with expressionless grey eyes. "We're not going anywhere," he said softly. "I might as well get some air."

"These cars could start moving any minute," Jon went on. The boy watched him coldly. Then he turned away and motioned to his companions.

"Come on out," he yelled. The other adolescents clamored into the road. A small dark girl, giggling loudly, hurried to Paul's side of the car.

"Come on out, mister," she said, grinning. "You're kind of cute for an old man."

"Get back in your car," he said. "These cars might start moving."



"They'd warn us first, wouldn't they? Sure they would." She leaned in the window. Her hands, dancing on the car door, seemed to have a life of their own, disconnected from her body. Her black eyes seemed glazed.

She's on something, thought Paul. One of her companions, a tall lean black girl dressed in loincloth and beads, was hollering at the burly man on his right. Paul had heard of the kids that cruised the automated highway, punching out distant destinations while they drugged themselves in their cars. There was little that anyone could do about the situation as long as the young people endangered no one else, which they were unlikely to do as long as they remained on the automated highways.

Someone pulled the dark-eyed girl away from his window and Paul found himself gazing at a scholarly-looking boy with glasses and freckles.

"Excuse me," said the boy. His tongue seemed to trip over the words. "I feel kind of sick. You got any stomach stuff?"

"I'm sorry, but I don't."

"That's too bad. I think I'm going to vomit." The boy's speech was slurred. He squinted at Paul. "I've seen you," he said in sonorous tones. "I know who you are, I know I do. I watch the news a lot." The boy sighed. Paul could hear the black girl and the burly man exchanging remarks. "You're the guy with the clones, Paul Swenson. You want to hear a good one? What's

two identical tornadoes? Bet you can't guess." The boy paused. "Cyclones." Paul could feel the perspiration on his face grow cold.

The discovery seemed to galvanize the boy. "Hey!" he screamed at his companions. "It's Paul Swenson over here in this car!"

"Who's he?" asked the dark-eyed girl. The black girl came to the window and glared at Paul.

"He's the man," she said slowly, "who thinks he's so damn fine there should be more of him around."

"What the hell," said the burly man. He was staring at Paul with astonishment. He was leaning far out of his window now, his thick arms over the car door. "You're some kind of a pervert, Swenson, you know that? Why can't you have kids like a normal dude instead of freaks?"

Paul felt a tap on his shoulder and turned. "Paul," said Jon, "one of the kids passed out on the road." Jon began to unfasten his belt. "We've got to get him back in the car fast."

"Do you think his friends will let us?"

Jon didn't answer. He was already opening his door. Paul released his own belt.

The tall boy and the black girl had moved toward the car on Paul's right. "You fat bastard," the boy shouted at the burly man. He opened the man's car door suddenly and the man tumbled into the road. "I don't like your looks and I don't like you calling Corinne a black savage." The man, on his knees

now, was trying to stand up. The boy began to kick him in the stomach.

Paul was out of his car and beside the boy without thinking. He pulled him away from the man and suddenly felt nails digging into his arm. The black girl was clawing at him. He thrust her away.

He could see frightened faces peering out of the nearest cars. He would get no help from anyone else, he knew that. No one would risk getting out into the road.

"Come on, Swenson," said the grey-eyed tall boy. He started to circle Paul, weaving uncertainly. "I can take you. I can take you and your clones all at once. Come on." The boy threw a punch. Paul stopped it with his left arm and managed, almost accidentally, to hit the boy in the stomach. The boy groaned, then leaned over and vomited into the road.

The two girls had disappeared. Paul helped the burly man to his feet. The man got inside his car and Paul helped him fasten his belt. "Are you all right?"

"I don't know," said the man. "I think so."

"There's a hospital at Alasand. Punch out at the next exit and drive over to it, just to be sure."

"Thanks, Swenson."

The tall boy had stopped vomiting and was leaning against the side of Jon's car. Paul grabbed him by the arm and propelled him toward the left side of the highway. As they approached the boy's car, he noticed that the freckled boy was

already climbing inside. The two girls were in the back seat with the boy who had passed out. Paul pushed the tall boy into the car.

"Why should there be five of you?" the black girl shouted at him. The dark-eyed girl was giggling softly. Paul stood there in the road trying to figure out what to do next. He was afraid to leave the young people alone in their car now, hurtling to whatever destination they had. The freckled boy was moaning softly, holding his stomach.

"Paul!" Jon shouted. "Get inside, now!" Cars all around him were buzzing furiously in warning. He dived for the driver's seat, barely slamming the door behind him before the car began to move forward on the highway.

The car was still buzzing. Paul fastened his belt. He was breathing heavily.

"That was close," said Jon, wiping his face.

"Those kids," said Paul. His hands were trembling slightly. He realized he was sweating profusely. He suddenly felt frightened, although he was now safe in the car. The highway looked the same as it usually did, streams of cars rushing toward their destinations.

"Are you all right now?" asked Jon.

"I'm fine." Paul closed his eyes. *I must be getting old*, he thought to himself; *I can't even handle things well any more. I'm either a passive observer or I do everything wrong.* What he should have done, he told himself now, was put two or three

of the kids in Jon's car, gotten into the kids' car himself, and met Jon at the Alasand hospital with them. There was no telling what they had taken or what its effects might be. All they could do now was call the emergency center at the hospital and give them the car's license number and the direction in which it was traveling.

Paul overrode the previous destination and punched out the next exit on the dashboard controls. Then he clenched his teeth angrily. *Why should I care*, he thought, *about a bunch of idiotic kids who could have gotten themselves and me killed?* Perhaps the drug had only brought out a viciousness that was already present. The anger subsided, leaving a residue of shame. He was being unfair. They were not doing anything that different from what he had done at their age. He had once possessed the aggressiveness and impatience of the grey-eyed boy and the uncertainty of the freckled boy. He had gone to parties and taken whatever the others took. It had been fear of what might happen to him that made him stop, nothing more.

Still, he had been sheltered from the world's irrationality until recently, exploring his scholarly interests. He thought of the clones. If left alone by the public, they would grow up in the same sheltered atmosphere and perhaps be unable to deal with others unlike themselves. If, on the other hand, they were overly exposed to the

publicity and occasional cruelties they might encounter, they might retreat from the world, hurt and bitter.

But were his worries any different from those any parent might have? Becoming a parent for the first time should worry any sane person and his circumstances were more troublesome than most. Maybe he was, at almost fifty years of age, a little old to be embarking on parenthood for the first time. But he could make up for that. He had experienced more than many younger parents. He also knew more about what his kids would be like than most parents did. He almost chuckled at this. It would not be hard for him to put himself into the place of one of them when sympathy was needed.

The car turned off the highway and buzzed at him as it circled the ramp. Paul took control and drove along the road until he saw a picture-phone booth on the side. He pulled over.

Jon unbuckled his belt. "I'll make the call," he said, opening his door.

Paul hoped once again that the teenagers would be all right.

xiii

**P**AUL WAS NERVOUS. He stood next to Zuni and Bill in the laboratory and wondered how he should feel. He would be a parent, probably before the hour was over if everything went as expected. He felt both anticipation and anxiety, each displacing the other in rapid

# DAVID REDD

*After the atomic war, the battered coasts of Northern Europe became the Free Territories. For twenty years they knew peace, and then . . .*

## WARSHIP

Illustrated by MIKE KALUTA

A WARSHIP HAUNTED HIM. Erik could see it now, even though he walked alone on the snowy breakwater and the surrounding sea was empty.

The warship had appeared six days ago.

"Can't make up your mind?" Torin had asked. "Next time we pass Guya, stand on the end of the breakwater. We'll steam in and pick you up."

After six days of the dilemma, Erik left the harbour secretly. He walked slowly along the deserted white arm of land towards the Guya ruins. His thoughts were as wintry as the ice-cold wind from the sea. Should he join Torin? Nothing could be easier. Nobody knew where he was, not even Vigna. He could step aboard the warship and walk into a different world . . . if he wished.

The gun, so carefully preserved, was in his pocket. A cowardly

thing, a weapon, for someone who had strength in his two good fists—but he had to carry it.

So Erik trod the snow of the old breakwater on its miles-long sand bar, his eyes watching for the dark sea-shape of Torin's warship. Ideas filled his head like moths rushing to a flame. Torin and his easy friendship, Vigna and her grave little smiles, the long empty winters growing longer every year, all these things beating at him until he trusted nothing but the grey sea around him.

Erik had seen Torin's warship, had paced its deck in a blizzard and felt it riding the waves. He had seen the guns and rockets . . . but there was no law against what Torin did; the laws of the Free Territories extended only to the horizon. Torin and his men were outside the law.

A warship. A memory of the pre-atomic past, or a static-filled broadcast from Africa. There were

no fighting ships because people had no reason to fight—until Torin came.

Twice Erik had refused to join Torin, but each time he had become more undecided. Now he approached the third decision, and he was sure of nothing.

He felt a cold breeze drift towards him, rippling the smooth water. Far to his right he saw the mainland, all white snowdrifts and brown windswept rocks. Hidden behind the curving cliffs was the harbour where he had lived all his life.

Erik remembered his childhood. Sunny days . . . with Torin and his friends. There had been food to spare then. It seemed a dream, as he walked through the bleak winter daylight to meet Torin again. Had he really done the things he remembered? Maybe there was no such thing as the past, and memory was only an explanation of the present.

He remembered Vigna. She wanted him, and he wanted her. But he had to see Torin one last time . . .

He had the gun in his pocket to help him decide.

Sometimes wandering preachers came down the coast, avoiding the Karbenist lands. They preached of a Being somewhere who watched mankind, who would show himself when men had risen above their sufferings. Erik knew why they believed in this Being; to remove the fear of imprisonment in an empty and purposeless world. He



could feel that fear now, alone on the thin man-made breakwater in the middle of the half-living sea.

Only memories could guide him. He longed for Vigna; without her presence she too was only a memory.

Miles ahead, at snow-covered Guya, he would face Torin.

THE DAY Torin first approached him, nothing had been further from Erik's mind than the warship.

He was tightening up the last bolts on the engine casing when Mamma arrived. Mamma was Vigna's mother, fat and sloppy in a cast-off naval uniform, but with bright lively eyes in that round puffy face.

"Hey Erik," chuckled Mamma, "some friends of yours in the harbour! Torin Skanse and his gang."

Erik stiffened. "No friends of mine, Mamma!"

She was teasing him again. They'd been friends years ago, but one winter Torin had found the warship and sailed to new horizons behind the concealing snow—leaving despite his post-war education which should have taught him the difference between right and wrong.

Throwing down his spanner, Erik wiped his grimy hands on his overalls. The boat was Mamma's, the *Kalev*; Erik had done the repairs as a favour, because Vigna was busy balancing accounts for another trader. He showed Mamma the corroded filters he had

just replaced. "I thought you took care of her?"

"We try, lad." Mamma's breath clouded in the cold air. "But we had work coming in, a rush of it. We couldn't stop."

Erik nodded. Nobody in their right minds would turn away work. "I know, Mamma. Well, I've finished the job. Listen to her running now."

He turned, reaching for the power mechanism. As he stood up he saw a huge unfamiliar ship across the harbour, silhouetted black against the orange frost-sunset. He paused, realising that it could only be the warship.

He stared at Mamma. "You weren't joking about Torin!"

Mamma shook her head. "I gave up joking about things that matter years ago." She glanced across to the anchored warship. "He came in while you were busy on the engine."

And soon he had more news of Torin. As he and Mamma listened to the engine, Erik saw Vigna crossing the frozen quay towards them. He cut the power as she arrived.

"Sounds good," said Vigna. She was tall and thin, unlike her mother, but with Mamma's curly blonde hair. "Erik, you'll have to join us full-time."

He grinned, knowing what she meant.

Mamma folded away the money Vigna had earned from her book-keeping. "Is that all? The old crook!"

"Mamma, I couldn't save him very much. If he hadn't had honest books this year they'd have checked through everything."

Erik began packing away his tools. He'd have to return the ones belonging to Polti before dinner. Vigna helped him tidy up.

"I saw a friend of yours just now," she said.

A friend. "Torin?"

"Yes, Torin. He's showing people over his warship. Boasting a bit, they say, and he's giving out drinks like water."

Torin was always generous. "How long's he staying here?"

"Today, tomorrow," said Vigna.

"You two'll be away to Silte tomorrow," said Mamma. "Now, we're shipshape again. Time for dinner." Dinner mattered more than Torin.

Erik was invited, of course. "Dinner," he said. "Good! I'll just take these tools I borrowed back to Oberleutnant Polti."

"You hurry back!" said Mamma. "We aren't the hotel, to serve at all hours while you gossip!"

"I wouldn't miss a dinner with you, Mamma!" Erik lifted his work-bag. "I'll be right back!"

WATCHING HIM GO, Vigna shook her head. "He wouldn't miss a dinner with anyone if it was free."

ERIK FOUND the Oberleutnant in his little office, reading through some papers. "Me again. I've brought back your things."

Polti glanced up, briskly. "Thanks, Erik. You know where they go."

Erik unlocked the police equipment chest. Borrowing each other's tools helped Polti's expense fund, and helped Erik's funds even more. He gestured at Polti's papers. "Busy?"

The Oberleutnant shook his head. "Only tax returns. We're averaging 50% collected, this year."

"Not bad," said Erik, putting away the tools. "We're very law-abiding round here."

"That's your Vigna's work." Polti chuckled. "When she does the skippers' accounts it makes life easier for me, I can tell you."

"And me," said Erik. "My only piece of luck this summer." A few months ago his partner had given up, forcing Erik to manage their boat alone. Since then he'd been struggling. "Mustn't complain, though. She's cooking our dinner tonight."

"Good for her," said Polti. "With trade so bad, somebody's going out of business this winter. I hope it isn't you."

Erik closed the chest. "You wouldn't miss me, the zero taxes I pay nowadays." He picked up his bag to go. "Thanks for the gear, we fixed Kalev fine. We're celebrating now."

He left Polti with his papers and went whistling from the office. Out in the slushy street, he remembered he hadn't asked Polti about Torin. No matter. Vigna came first.



He turned the corner, heading for Vigna's house. He saw few people in the road. The buildings were half empty, unpainted, with boarded windows. The townfolk were either working, or passing the time with beer and singing. He could hear them at it in a nearby drinking-house, and glanced towards it. Until recently he'd spent most nights with them.

"Hey, Erik!"

He paused, seeing someone wave from the doorway.

"Erik! Come on in!"

The man in the drinking-house was his old friend Karl, who had left the district last year. Karl must have joined the warship's crew.

Erik hesitated.

IN A DIMLY-LIT CORNER of the drinking-house, hunched and unnoticed in a shabby dark raincoat, was a thin grey old man who sat listening to the talk and laughter. He never smiled; he had an ugly nickname which meant The Gnome. He sat here because it was warm. He had no drink before him because he could never afford one. He saw a man go to the door, and saw him return with a newcomer. Erik.

The Gnome had been watching Erik for several days, carefully following his movements. Surely Erik should be with Mamma and Vigna tonight, not drinking with Torin's young devils. That was Karl Lindstrom leading Erik in. And—yes, they were going over to

Torin.

From his corner the grey shrunk man could hear everything in the room; he had the ability to pick out a single conversation from the many and understand it perfectly. He picked out Torin and Erik.

And the cheerful landlord, passing by, laughed and punched his shoulder. "Hah! Enjoying yourself, Gnome? Ha-ha!"

The Gnome scowled, shook his head and listened.

" . . . a good life, Erik . . . . Geese in the Leningrad marshes, by the hundred . . . come back and try some after this place closes . . . "

" . . . none of this God-awful scraping and struggling. A fight now and then . . . but, hell, it's a warship. And tomorrow morning we're off again."

So they were dangling the same bait before Erik, thought the Gnome. They'd hooked a few boys already.

" . . . Listen, Erik, I know why you didn't come to Danzig with me. But if you're on your own now there's nothing stopping you. The boys all know you . . . I could do with you aboard, Erik. How about it?"

" . . . Well . . . " It was Erik's voice.

Young fool. He shouldn't be in here. Time to go and report what the boy was up to.

The Gnome watched him a moment longer, seeing him shake

his head. He hadn't taken the bait yet. Yet. The Gnome frowned, and slowly stood up to leave.

"Ha-ha!" laughed the landlord, beside him. "Drink up, Gnome! Ha-ha, ha-ha!"

For this thin shrivelled old man who never drank was his only customer who owed him nothing.

The Gnome wound his tattered blue scarf around his head and moved away. He slipped out into the chilly evening, leaving the noise behind him, and nobody saw him go.

Finally Erik made his escape, grinning and shouting to his friends. He staggered into the dark street and coughed as the icy air hit his lungs. It had been hot and heady in there; he could have been intoxicated by the talk and atmosphere alone.

Torin was still as persuasive as ever.

Erik felt calmer in the fresh air. He saw the stars bright and frost-clear above him.

Vigna would be waiting.

Then, as he hurried over the freezing slush, he saw someone standing in the road ahead, waiting for him.

The Gnome, returning from his latest errand, heard the crunching footsteps. He stopped and watched Erik come towards him. So the boy had dragged himself away from Torin at last. The Gnome had been busy while Erik was drinking.

When Erik was almost up to him, the Gnome bent forward. He saw

Erik stop and look at him.

"Huh!" said the Gnome.

The boy looked away, his face pale, and hurried past.

He was safe, thought the Gnome. Too ashamed-looking to have joined the warship. The Gnome stared at Erik's disappearing form. The people who paid him should be interested.

ERIK ARRIVED.

"You're late," said Vigna.

He could smell the stew in the kitchen, but somehow his appetite was gone.

Mamma sniffed. "You've been drinking."

Erik didn't enjoy the meal.

They ate quietly, hardly speaking. In a way he was glad they didn't mention Torin, otherwise he'd have had to tell Vigna everything. He wasn't hungry. The heat reminded him of the drinking-house—Mamma's kitchen was also her living-room, to use the oven's heat.

They finished eating. Vigna put the dishes in the sink, while Mamma produced some wine. Erik accepted a cupful.

"Thanks. You don't think I've had enough?"

Mamma chuckled. "Erik, lad, if you can't hold your drink now you never will."

He relaxed. Mamma probably guessed where he'd been, but she trusted him.

The clear red wine was cool and refreshing. Feeling better, he

started talking about work.

"We've got *Kalev* shipshape again," he said. "You'll have no trouble on the run to Silte tomorrow."

"Not from the engine," said Mamma. "The wind might come up."

"Not so soon," said Erik.

"It's a five-day trip. We should have two aboard. But there's things I could do here, if you went with Vigna."

"What things?" called Vigna.

"You finish the washing," said Mamma.

Erik had no commissions now. He'd suggested that he go with Vigna on *Kalev* tomorrow, to check his repairs and to be with her. Vigna wanted him along, but he wasn't sure about Mamma.

"The main trouble," said Mamma, "just arrived. It's Torin."

"Torin?"

"He asked you to join him."

Erik jerked with surprise. Mamma offered him another drink, and he needed it.

Vigna came back from the sink. "We heard where you'd been, Erik."

"Oh." He should have known. "Did you come looking?"

Vigna said, "We didn't have to look. The Gnome told us."

Erik remembered passing the grey figure of the Gnome in the road, and he understood. Erik knew the Gnome well; he'd often bought food from the old man's street-tray. The food wasn't very good, or very

clean, but it was cheap, and the Gnome sometimes found printed books for Erik to buy or borrow. Erik had heard about cargoes from the Gnome—and so, probably, had Mamma.

He had to speak carefully. "Well, if you know everything . . ."

"Not everything," said Mamma. "Are you joining the warship?"

"The Gnome didn't tell you that?"

"No," said Vigna. "Anyway, I'd rather hear it from you."

Now he could tell the truth, it was easy. "I said no. I don't want any part of piracy."

"Good!" said Mamma, offering him the bottle.

"No thanks," said Erik. Any more and his head would be swimming again. "Vigna, you know what Torin does. Do you think I'm like that?"

She looked very serious—a typical Vigna face. "No, not really. You were friends with him once, that's all. Your crowd now are decent enough, you and Polti and the rest."

He saw Mamma put aside the bottle. The celebration was over.

Mamma frowned. "You say you've had enough, all right. But you listen to me, Erik, I'm not taking any chances with Vigna. She's all I've got, and I'm not losing her to the first sweet-talking boy wanting an easy life from her boat and her accounting. No, not to the second or to the third."

"Mamma," said Vigna, "I can

make up my own mind."

"Quite right," said Erik. "You can look after yourself."

"Huh!" Erik felt Mamma's big bright eyes flickering upon him. "A coal run to Silte won't worry you. But what if Erik goes off with Torin? Do you follow him then, my girl?"

Erik glanced anxiously at Vigna.

"Mamma, if I loved him—"

The kitchen went very quiet. Erik kept his eyes on Vigna.

"There's no such word as if," he said. "Either you do or you don't. And I'm not joining Torin. Not tomorrow, not ever."

NOW, SIX DAYS after making that promise, he was going to meet Torin. He walked steadily along the breakwater, leaving a trail of deep footprints in the smooth snow. Each step cost him something. He kept remembering Vigna's face, remembering every word of his promise to her. The thought of the warship could not dull his memory for that.

He could see the weatherbeaten concrete dome of Guya fortress only a mile away, guarding the deep-water channel. There, surrounded by ocean, he would see Torin's warship come steaming towards him over the edge of the world.

The warship had drawn him away from Vigna. An actor in love's comedy finding another role. He had struggled hard to stay alive this autumn; surely those struggles

deserved a reward. Everything he owned was tied up in two useless boats, one falling apart and the other lying unfinished in a bankrupt builders' yard. Selling parts of the half-built craft had kept him going.

If only other countries weren't forbidden to Free Territories people. He could sail to Africa, or America . . . he remembered seeing American coloured comics from the smugglers' children. If he hadn't come to know Vigna perhaps he'd have risked the sea patrols and the Karbenists, to follow the sun, as the song said, seeking a better world.

Had Torin been pursuing the same dream, only to be captured by the warship he had found? Erik remembered his gun, and knew he would never use it.

Now everything seemed a dream except the snow under his feet. Or was that illusion too? He was very far from the whitewashed mainland, isolated by the sea. Snow was a part of winter, which came and went, but the sea was here forever. He could hardly believe that men had built the breakwater, that it was a memory in stone. At this moment people might never have existed, and the changeless sea might yield up some primeval monster rather than a grey smoking warship.

Sea monster and warship were both things of the past.

Perhaps, thought Erik, this was both beginning and end of his life, perhaps there had never been

anything else but this endless journey into the sea.

He remembered, or imagined, that as children they were fascinated by the water. They'd formed a brotherhood of sea-children, swearing never to swim so that the sea could take them when it wished. It was Torin's idea. Now the brotherhood was forming again . . . aboard the warship.

They'd tried very hard that evening in the drinking-house. He'd refused, so Torin said "Do what thou wilt" and laughed—then tried again to persuade him. Probably the warship was only passing Guya to give Erik another chance . . .

Erik gazed round; across the empty sea the snow-clouds were growing pale, as if light was breaking through. Below that light, Erik knew, the warship would appear.

Ahead, white from the morning snow, the concrete dome was closer. That fortress had once defended this coast, in the tense years before the atomic war. As a boy he had explored the deserted building, clambering over the huge rusting guns, snatching eggs from the nests of indignant seabirds, fighting fierce mock battles with his friends. Torin must have chosen the meeting-place deliberately.

There, as he approached, was the narrow iron door of the fortress. Trails of footprints led up to it, from the sea.

The door creaked, and swung open.

Erik saw a man come out.

FIVE MORNINGS AGO, his future had seemed secure and untroubled. He stood beside Vigna in her little wheelhouse, watching the land fall away as *Kalev* headed out to sea. Erik breathed in the cold salt air appreciatively, glad to be at sea again. He was never really happy on land. These five days with Vigna, running coal to Silte, were just what he wanted.

The warship had left harbour, doubtless to Polti's relief, very early that morning. Erik was relieved too.

Vigna locked the wheel onto course. She smiled up at Erik. "Happy?"

Of course he was happy. The whole burden of living was now shared, no longer a burden. With two boats between them they could take any cargo going. He might even finish building the third by next summer, with Vigna's help . . . Vigna herself was the best part of it, he thought, holding her. Snow might be falling outside, the cold wind might be rising, but to him the future was bright and warm—

Until the warship returned.

An hour out of harbour, a dark shape came up behind them. Erik didn't realise they were being followed until it was too late. He stood astonished as the huge grey hull of the warship loomed from the snowclouds above him.

Men with guns lined its deck.

"You! Cut your engines!"

Vigna ran to obey. Erik felt sick. So this was Torin's answer to his refusal! Holding him up like a border patrol.

"Torin! Where are you?" He wasn't among the faces. "Show yourself, my friend!"

Weapons were raised. "No talking back! Your cargo—" The man broke off. "*Erik!*"

Karl had recognized him again.

Things moved quickly. Despite the stormy sea, the warship touched hulls with *Kalev*, allowing Erik and Vigna to ascend a rope ladder. Men hurried to take *Kalev* in tow. Erik helped Vigna to the deck, reassuring her, and saw Torin waiting by his men.

"Torin—"

"Erik, I'm sorry this happened. You should have told us you're using another boat." Torin motioned his men away. "False alarm, lads, but pretty smooth. Nicely handled, Karl."

Erik had to admire the way Torin was in control. He squeezed Vigna's hand, nodding at Torin. "Smooth. Quite a show, but I think you owe us something for it."

"Mistakes happen," said Torin, very quietly. "You see why I need you aboard?" Then he gestured at the whirling snowflakes. "Looks worse. You'd better stay aboard while the weather blows itself out."

"We're heading for Silte," said Erik stubbornly.

"All right, we'll tow you partway to make up your lost time."

"We might as well see your ship," said Vigna. "I'm interested."

Erik couldn't argue with her. He let Torin guide them below.

The warship was a beautiful thing, bright with oiled metal and unscarred paint, cared for like a first-born child. Erik thought of his own boat, even older than *Kalev*, and he sighed. Torin's methods got results.

Torin showed him the smooth clear decks, the gun turrets and rocket launchers, the groups of uniformed men . . . a pre-atomic seaman would be quite at home here. Erik shook his head. "If we'd tried running for it we'd never have stood a chance."

"Everything's pre-war, more or less," said Torin. "Those ancients had good ideas. Not just the weapons, either. This uniform the boys wear—it makes them feel they're part of something, gives them a bit of pride, helps them work together."

Working together, they'd accomplished a great deal, Erik noticed. The warship rode the waves and gusts of snow as if the sea had been calm. The neatest ship he'd ever seen . . . the food . . . and the old hands looked much fitter than the new recruits, much fitter than himself.

They sat in the mess hall, warm and crowded. Erik ate goose and potatoes from the ship's freezer, watching snowflakes pile against the glass in the cruel wind outside. He felt rather than heard the

smooth hum of the powerful engines below; it was hypnotic.

"Like it?" asked Torin. "I'll have more to show you one day."

Already he had occupied an overgrown, abandoned port where his technicians were rebuilding a small hydroelectric generator. Torin wanted to expand this base into a complete new settlement, run by himself, for himself.

"Ambitious," said Erik.

"No women on the warship," said Torin. "Not yet. But we'll need women when we develop the base. You think about that, Vigna. The town won't run short of anything, no trade quotas. We'll just send out the warship."

Erik understood. The old towns were all pre-war, their factories full of decrepit machines, their farmers working small fields of thin over-used soil. But Torin's people, starting afresh, would have new efficient equipment, fields deep in new rich soil and no cripples or elderly to support, no Territory taxes to pay. Everybody would be young, strong, working. They could make progress.

If Erik joined the warship now, he would be one of the leaders. He gazed around at the cheerful crewmen finishing their meal; this was the life he'd rejected.

He wondered if he was a fool.

IN DUE TIME the storm was over. They brought *Kalev* alongside again, drifting in a white-laced but friendly sea. Erik stood on the war-

ship's deck with Torin. Vigna was aboard *Kalev* already, busy checking everything.

"The boys would take orders from you," said Torin.

"They won't have to. We're taking that coal to Silte. I keep my contracts."

"Of course," said Torin. "But if you want a new contract, let me know."

Erik shook his head slowly.

"Can't make up your mind?" Torin asked. "Better think about it. Next time we pass Guya, stand on the end of the breakwater. We'll steam in and pick you up. Five days time, late afternoon. All right?"

He heard a burst of sound from *Kalev* as Vigna started the engines. Foam bubbled at the stern.

"Thanks for the meal, Torin. I hope your town works out."

He went down to *Kalev*.

"Guya!" shouted Torin.

Erik waved. He hoped Torin would forget.

Then Vigna sent the boat curving away from the giant grey hull, and the warship was behind them.

Four days passed. They came to Silte; unloaded their cargo; and departed.

"Oh, Erik!" said Vigna. "You're still worrying about Torin!"

He nodded. She had not heard that last shout of Guya.

"Don't worry," she said earnestly. "This new settlement of his—it'll never work. If his warship hits bad luck we'll never see him again." She was sorry she'd gone



aboard now.

"Torin doesn't have bad luck," said Erik. "He doesn't allow it."

"You didn't join him. I'm glad. But if you wanted to, I'd go with you."

"No," said Erik. "We're going home." But perhaps he should see Torin one last time . . .

When they reached harbour, Erik hardly knew Mamma's house. The outside looked clean and shining, whiter than the snowdrifts piled against the steps. Vigna gasped. "I've never seen home look so new!"

Mamma smiled, welcoming them in. Still the same puffy face, thought Erik, still the old sloppy uniform—but the way he thought of her had changed. Vigna's mother . . . his Vigna's mother.

"We've been busy," said Mamma happily. "My friend here helped me with your things."

The Gnome, silent beside her, nodded. He was still as shabby and filthy as ever, Erik saw; some things were beyond human ability to improve.

They'd brought over all his possessions, he discovered, everything from his last-reserve food tins to his tattered volumes of Strindberg. The Gnome had even found another printed play for his collection. So now his old house was abandoned again, and he was taken into Vigna's household.

"It's just right!" laughed Vigna. "It's wonderful!"

"Wonderful," agreed Erik. One

thing was certain: if he rejected this for the warship, Torin's promise had better be good.

**A**CROSS THE SEA, Torin was introducing the new recruits to the adventures he'd promised.

"You probably won't have to use the guns—these farmers are scared silly of us—but if you have to use them, shoot first and don't waste time asking questions. Now, fall in with the other boys and we'll go ashore."

The warship was anchored off a small settlement, a quiet lonely farming community. Untouched by the wider affairs of the Free Territories, the farmers had prospered—until Torin noticed their prosperity. Now their expansion had stopped, pigs and chickens were kept for tribute to the warship, and emaciated cattle were sent to graze among thorns. The first lesson in Torin's programme was Fear, teaching the people to obey him. Then when they were obedient he would allow them to prosper again . . . to serve him better.

The weather here was warmer; on open spaces the melting snow had turned the ground to mud. At the stockade, Torin and his men inspected their animals.

Torin grimaced. "Are these mangy worm-infested beasts the best you can raise? They aren't fit to eat, any of them! I wouldn't want the police to eat them, let alone my crew!"

"But . . ." protested the

farmers' leader, "these cows are our finest stock! We've looked after them—"

Torin turned to Karl. "They've probably hidden the good animals. You'd better search the village."

"Sure thing," said Karl. "We'll rip the place apart."

"We've hidden nothing," cried the leader. "We've done everything you said!"

Maybe. Well, Karl would enjoy the search, and his boys would do enough damage to frighten the farmers. If anybody protested, they knew what to do.

Torin had mastered the Karbenist logic which stated that man was an animal.

One of the watching farmers clenched his fist as the warship men made for the houses. Torin saw the movement.

"That man! Bring him here!"

A show of spirit, he thought, but he was disappointed.

"Now, farmer, you know what happens to people I don't like?"

The man mumbled a reply, head downcast. "Sorry . . . I only thought . . . I wouldn't do anything . . . didn't mean to . . ."

Torin spat in disgust. "Take him away to the execution fence." He heard the leader gasp. "Tie him up there. I'll decide what to do with him later."

He had his moment of power, of deciding a man's fate. The farmers knew it too, and their knowledge itself gave him power over them.

That greater power was what he sought.

Later, he had another opportunity. It occurred as he inspected the ramparts, when most of the village was lined up beside the great earthen banks they'd built for him. Ragged people, filthy and miserable, he thought. What a contrast with his fit, active crew in their spotless uniforms. Maybe he should ease up on them. His new community would need women, and while he himself had Lindy—Karl's sister—waiting at the base, the boys would want women from settlements like this. Perhaps he should give the farmers a chance to make themselves more presentable . . .

He had made the farmers build the useless defences to make sure they remembered him. The wall of earth and its snow-filled ditch seemed quite adequate, he noted—and then he saw a section which was not adequate. Shallow ditch, and earth bank loosely heaped and far too low—somebody hadn't been working.

Maybe some of the lazy wretches didn't deserve a chance. They weren't even fit for the human cage in a Karbenist zoo.

"This section wouldn't defend a mousehole, let alone a village! Who's responsible?"

An old woman spoke up. "I was in charge, highness, I did all I could. I worked extra to make up for them . . ."

"To make up for *who*?" growled

Torin.

The villagers shuddered among themselves. A group of them stepped back hastily, isolating four men in front of Torin.

"You four!" he shouted. "Did you make that apology for a ram-part?"

The four discovered they were alone. The nearest shrugged.

"We can't deny it, you bastard. We didn't build your bank because we were too busy clearing land."

"Too busy," said Torin softly. "You must be mistaken. You live and work by my permission—and I gave you no permission to clear land."

"We had to dig out the trees. This place is too small—the whole village needs more fields, especially us."

Torin studied the speaker. A wave of his hand and the man would be cut down without question. The man's face was familiar; perhaps he had been troublesome before.

"You're very brave, or very stupid. Are you saying the village should disobey my orders?"

"Yes."

This man, unrecognised by Torin, was Erik's old partner. He had given up cargo work for farming, and being a recent arrival his plot of land was small.

"You're gradually ruining us," he continued, facing Torin. "You want better animals but you don't give us a chance to raise them. You tell us to make this useless lump of

earth—"

"That's enough," said Torin.

He signalled to Karl. "Seize them—I want them on board, for judgment."

As his boys moved in, the four farmers fought back, lashing out with their fists. The spokesman knocked one seaman to the ground, before the others silenced him.

None of the other villagers had moved.

"I will deliver sentence when they stand on my own deck. If I am generous the ones with families may live." He sneered at the assembly. "I shall also devise some task for the rest of you, for not reporting these rebels sooner."

Karl whispered, "Why not shoot these now? Really frighten the rest?"

Torin sighed. Karl was eager, and useful, but he'd missed the whole point of taking the four away. Keeping them apart made the situation more dreadful for the other farmers. Karl didn't understand, none of them understood. That was why he had always been the leader while the others followed.

"Later," he said, "Take them aboard." His eyes wandered to the long grey shape anchored in the bay.

The warship.

His instrument of power.

Now.

Erik entered Guya fortress, stamping the snow from his boots.

He had not expected to find the Gnome here . . . or Oberleutnant Polti.

"We watched you coming along the breakwater," said Polti. "Are you waiting for Torin too?"

Erik nodded. He had been alone on the breakwater for so long, he had trouble adjusting to the situation.

"I'm here," he said. He could hear waves crashing against the rocks outside, could feel the wind whistling through the empty windows. He saw Polti standing by the guns—

The old weapons, once rusting and useless, were now clean and oiled. Racks of sinister shells stood beside them.

—Waiting for Torin.

In a few minutes Erik understood. The police thought Torin too dangerous to be left free any longer. Polti was ready to destroy this relic of the past, this warship which was on its way. He had spent days out here, busy repairing the guns while Erik was visiting Silte. The Gnome, who heard everything, had told him when Torin would return.

"Two guns here," said Polti, slapping a huge gleaming barrel. "Listen, Erik, the Gnome won't help me. Will you take the other gun when Torin arrives?"

Erik shook his head. He had a small hand gun hidden in his pocket, but that was in case of trouble. He only wanted to speak to Torin, and clear his thoughts. He meant Torin no harm.

"Erik!" said Polti. "Will you help me?"

"No!" shouted Erik. "I can't decide!"

The Gnome, watching, might have smiled.

Silence. Erik went to a window, and stared moodily at the grey sea and sky. The clouds promised more snow, but as yet the light was still soft and clear. There was no sign of the warship. He tried hard to think. Why did Torin have this power to muddle his thoughts? Vigna . . . . He turned back to Polti.

"I don't see why you hate Torin so much. You belonged to our sea-brotherhood once!"

"I wanted to learn swimming," said Polti. "You should have got out too. When I started thinking again, I found where Torin got his ideas."

Erik gazed again at the guns, the long twin cylinders pointing seawards, built for an enemy who never came. Perhaps it was right that these ancient weapons should attack a warship from the past. Polti was protecting a dream . . . for if the past was only a memory, the future was surely a dream. Standing here, Erik could not *feel* the future at all; a different man would meet the warship.

He couldn't join Torin. Vigna wouldn't be happy; neither would he. But would he let Polti fire on Torin, would he prevent it, would he take part? In a way he envied the singlemindedness of the Gnome, who did nothing but survive.

Probably the Gnome had forgotten laughter or music, and knew sunshine as a gap between clouds. Yet the Gnome would never shoot at Torin, while Polti said they should destroy the warship because he thought it right. And Polti wouldn't pay the Gnome to shoot.

They argued. Erik wondered, should he protect Torin from Polti?

"For God's sake," said Polti, "I don't hate Torin. It's his warship I'm after!"

"The warship," said Erik slowly. Torin was doing the things Polti objected to, not the warship. The vessel was just a tool.

"Yes, the warship," Polti went on. "It doesn't belong in our world—it's a machine for domination. Torin's warship creates power over people and that's against the basic law of the Free Territories. Our very name shows how we defy the inland countries. People should be free. That's why I'm here, to protect people. Not collecting taxes or sorting out stupid drunken quarrels, but saving people from domination. Now do you understand?"

"I think so," said Erik. "Maybe. You say we should be free of leaders?"

"Leaders should be chosen because they're good at governing, not because they want power. Torin's taking us back to the old days when people wanted so much power, they wrecked the world to get it." Polti sighed. "Am I making sense? It's the reason the Free Ter-

ritories are still free, even though living would be easier under others. We're learning to cope with power. Learning responsibility, the first real effort anywhere. It's working, too. Torin's ideas will die out as things get better—provided we stop this warship perpetuating his dreams."

He really believes it, Erik thought, but he said nothing.

"I mean to destroy it," said Polti.

"Why?" cried Erik. "Can't you leave Torin alone? Maybe he's right to bring back the past!"

"Never," said Polti. "There's got to be progress, or none of this is worthwhile. I must leave things better than I found them . . ." Polti grimaced. "Or don't you need a reason for living?"

In the sudden silence, the Gnome spoke from the window.

"The warship's here."

Erik had distracted Polti from keeping watch.

The grey vessel was very close, steaming along the deep water. Erik could see crewmen by one of the ship's boats—perhaps the boat would be launched to pick him up.

"I'll have to swing the barrels down," cried Polti, and he jumped for the guns.

Erik felt the tiny automatic in his pocket. If he wanted to save Torin, now was the moment.

No. Polti was his friend too.

The Oberleutnant, after calling Erik to help, gave up shouting and concentrated on lowering the gun barrels towards the warship. Erik

watched him. No, he couldn't be like the Gnome either, always the bystander. Vigna would never approve. So he was with Torin or with Polti, for the warship or against it. But which?

Polti's words had stuck in his mind. "Reason for living." Erik had no such guiding principle; he merely drifted along. The preachers served their God, the Karbenists served the State, Polti served progress. What, thought Erik, did Torin serve?

The answer came out of his memory, and he shivered.

He went down to Polti.

"You don't want to kill them."

"No."

"You just want to sink the warship."

"Yes."

And now the huge gun barrels were almost level, pointing straight across the sea.

Under the threatening sky, the warship's boat was lowered to the water. They must have seen Polti's launch and thought it was his.

Erik studied the mechanism, finding a small squat handle like a detonator control. "Is this the trigger?"

"Yes. Whenever you're ready. You don't have to."

This was the moment of decision. He was handling an ancient weapon of destruction—the old too-great power Polti had talked about. Like the warship it had been waiting all these years for someone to use it. Now he was here.

"I'm ready."

His first shot went high, skimming above the superstructure towards the horizon. Polti aimed lower, sending a fountain of water from the warship's side.

Torin's men were fast, well trained. Before Erik got his second shot in he saw a puff of smoke from the nearest gun turret. As he fired, the breakwater behind the fortress exploded. He watched the results of his firing amid the rattle of debris on the roof.

The shell went in just below the waterline, and it must have pierced a hold. The warship seemed to settle lower in the sea.

That was enough for Erik. He turned away from the guns, leaving Polti to pump more shells into the crippled vessel. Someone out there was firing off salvos of rockets, but they were going wide. He watched the warship listing over, gradually falling to one side. *I did that*, he thought. *I destroyed your dream, Torin.* He had probably killed some of Torin's crew, too, but he wouldn't feel sorry for them until later.

Torin had chosen Guya, had been betrayed by a memory.

WHEN THE FIRING STOPPED he took the police launch and went picking up survivors. Someone on the warship's boat shot at him, until they saw what he was doing. After that the battle was over.

Torin was pulled from the sea not breathing, and though Erik did his

best he was beyond reviving. Erik brought the other men ashore.

Oberleutnant Polti did something in the fortress, then came out running.

"Back to the boats! I've set a fuse to the rest of the shells. They'll go up in five minutes. Hurry!" Erik pointed to Torin's body.

"Leave it!" snapped Polti. "No charges against anybody, understand? I'll have the warship broken up for scrap. For God's sake, Erik, get moving! You know what those

shells can do!"

The two boats were well out of range when the fuse reached its end. In a last tremendous explosion the old weapons of Guya destroyed themselves. The sea swirled, but the warship had sunk too deep to be revealed. Erik shook his head slowly, then steered the launch on towards harbour.

The first snowflakes were falling to cover Torin, but the sea had already claimed him.

—DAVID REDD

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION (Act of August 12, 1970, Section 3685, Title 39, United States Code).

1. Date of Filing: October 1, 1973
2. Title of Publication: Amazing Stories
3. Frequency of Issue: Bi-Monthly
4. Location of Known Office of Publication: 69-62 230th St., Oakland Gardens, Flushing, N.Y. 11364
5. Location of Headquarters or General Business Offices of the Publishers: 69-62 230th Street, Oakland Gardens, N.Y. 11364
6. Names and Addresses of Publisher, Editor, and Managing Editor:  
Publisher: ULTIMATE PUBLISHING CO., INC., 69-62 230th St., Oakland Gardens, Flushing, N.Y.  
Editor: Ted White, Box 7, Oakland Gardens, Flushing, N.Y.  
Managing Editor: None
7. Owner: Ultimate Publishing Co., Inc., 69-62 230th St., Oakland Gardens, Flushing, N.Y., Sol Cohen, 69-62 230th St., Oakland Gardens, Flushing, N.Y., Arthur Bernhard, 5205 Casa Blanca Rd., Scottsdale, Arizona
8. Known Bondholders, Mortgagees, and other Security Holders Owning or Holding 1 Percent or More of Total Amount of Bonds, Mortgages or Other Securities: None
11. EXTENT AND NATURE OF CIRCULATION

		Average No. Copies Each Issue During Preceding 12 Months	Actual Number of Copies of Single Issue Published Nearest to Filing Date
A.	Total No. Copies Printed (Net Press Run)	67,881	66,598
B.	Paid Circulation		
1.	Sales through Dealers and Carriers, Street Vendors and Counter Sales	24,768	24,500
2.	Mail Subscriptions	1,809	1,993
C.	Total Paid Circulation	26,577	26,493
D.	Free Distribution by Mail, Carrier or Other Means		
1.	Samples, Complimentary, and Other Free Copies	0	0
2.	Copies Distributed to News Agents, But Not Sold	41,072	39,682
E.	Total Distribution (Sum of C and D)	67,649	66,175
F.	Office Use, Left-Over, Unaccounted, Spoiled After Printing	232	523
G.	Total (Sum of E & F—should equal net press run shown in A)	67,881	66,698
I certify that the statements made by me above are correct and complete.			Sol Cohen, Publisher

ON SALE FEBRUARY 19th in AMAZING STORIES

The first instalment of JOHN BRUNNER'S greatest new novel—TOTAL ECLIPSE. Don't miss it.

WARSHIP LICENSED TO UNZ.ORG  
ELECTRONIC REPRODUCTION PROHIBITED



*Our Associate Editor's last appearance here was "There's No One Left To Paint The Sky" (May, 1972). This time he offers a longer story about a man, a woman and a guitar in old—*

# **ANNAPOLIS TOWN**

## **GRANT CARRINGTON**

**Illustrated by RICHARD OLSEN**

**W**HEN MOST PEOPLE think of Annapolis, they think of the Naval Academy. They don't think of it as the capital of Maryland, with the State House and legislative offices.

To me, Annapolis is like an old New England town, with its narrow streets, the gentle hills leading down to Chesapeake Bay, the cobblestoned area around City Dock, where a dime store faces out onto the Severn River, and with its two old traffic circles and the two-century-old campus of St. John's College.

It reminds me of the shoreline towns of my native Rhode Island. I guess that's why I moved here as soon as I discovered it. It's an hour's drive each way to my job with the federal government in Washington, but it's worth the extra trouble.

For one thing, there's Tom Raymond's guitar shop. Tom is one

of the best independent guitar makers left in the country. Most of his time is spent in repairing instruments, but he manages to turn out about ten guitars a year, each unique, each different, each very simple, and every one of them well made. The few times he makes a mistake, he scraps it and starts all over.

I was hanging around in his shop on a Saturday afternoon, with the salt wind blowing from the bay up the narrow alley to his shop, when she walked in. She stopped in the doorway, smelling the sawdust in the air and blinking to adjust her eyes from the bright spring sun. The sunlight, sectorized by the old windowpane, seemed to glow on her pale yellow shirt.

She saw me standing there talking to Tom, who was busy sandpapering the shellac off someone's fiddle, and immediately

disregarded me.

"Are you Tom Raymond?" she asked Tom.

Tom grunted a reply. Sometimes I think he has some New Englander in him.

"You make guitars?"

"Yep."

"I'd like you to make a guitar for me."

"You would." It was an uninflected statement, not a question.

"I have the drawings here."

I walked over to look at the papers she was spreading out on one of the benches. They were neatly drawn, with braces, dimensions, and cross-views all clearly indicated.

Tom came over to look at them. "Who drew these?" he asked, a note of interest creeping into his voice.

"I did."

"Are you a draftsman?"

"No, not exactly. The measurements were taken from a guitar I once owned. It was destroyed in a silly accident."

"You don't want a brace here. That would be unnecessary." He pointed to a place on the drawing.

"I think that would result in some interesting harmonics," she said.

For fifteen minutes they discussed the drawings, the deficiencies of the design and improvements that could be made, and the woods that would be used for the sides, top, bottom, and neck.

"Eight strings," Tom said. "You sure you want eight strings,



ma'am?"

"Yes," she said. "What's wrong with that?"

"Well, most guitars have six or twelve strings."

"Oh." She said it as if she didn't know.

"Of course," I said, "there are plenty of oddly-strung guitars. Big Joe Williams uses nine strings and Spider John Koerner has a seven-string National, doesn't he, Tom?"

He nodded. "I guess you'd have to use an open tuning with this thing."

"What?" The confidence she had had when she entered the shop was rapidly disappearing.

"An open tuning," he repeated, but didn't explain. "What are you going to use for the extra strings?"

"Oh, I'll have special ones made."

Tom snorted.

"Will you do it?"

Tom nodded. "I suppose so. It'll cost you around five hundred dollars, though."

"Money is no problem," she said eagerly. "How soon can you have it done?"

"Well, I've got a lot of work to do before I get to it. I'll have to order some of the woods. It'll be a couple of months at least, but I should be able to get it done within half a year if I don't run into any trouble."

"But I must have it sooner. I'll pay you double, one thousand dollars, if you do it immediately."

Tom gathered the papers together and handed them to her.

"Lady, there are people who are depending on me to do work for them first. You're no better than they are."

They don't make many like Tom any more.

She stood there, not yet accepting the drawings. "Two months?" she whispered, nearly pleading.

"I can try. No promises. But I'll try."

I DIDN'T SEE HER again until the next Wednesday. Each Wednesday evening, some of the local musicians get together in Tom's shop to play bluegrass. There's a little card in the corner of a window that mentions it, and apparently she had seen the card.

I saw her walk in and listen to them play, sing, and joke for about fifteen minutes, then she walked back out into the street.

I followed her. She was standing in the alley, looking at the children who raced up and down the narrow street and watching the people loafing on their porches, listening to the music that drifted out of the shop.

"Kind of peaceful out here like this," I said. She looked up and apparently recognized me. "Like something out of the past."

Her head jerked around suddenly. "What do you mean?"

"Well, it's sort of like a scene out of the Nineteenth Century, if you can ignore the automobiles." I nodded toward the old people, dressed in their old-style clothes, pants held up by suspenders, and long dresses.

My white shirt and casual pants were more in keeping with the scene than her miniskirt.

She smiled. "Yes, I guess it is." Then she made a grimace and gestured toward the shop. "Is that the only kind of . . . music they know how to make?"

"They're bluegrass musicians. It's still popular music around here."

She shook her head. "What about you? You were here the other day. What's your connection with this?"

"Nothing much. I just like music, and Tom's an interesting person to talk to."

"You don't play an instrument?"

"I fool around with the guitar a little."

"Why aren't you in there?"

"I play classical guitar."

"Really? I'd like to hear you some time. I think I'd enjoy that more than this bluegrass."

"Well," I said, "my apartment's a couple of blocks over."

She laughed delightedly. "Ah, you're going to try to seduce me."

But as we walked over, she slipped her hand inside my arm, and we walked through the picturesque streets of Annapolis town like a Nineteenth Century couple . . . in miniskirt and tapered trousers.

**F**ROM THE OUTSIDE, the building where I have my apartment looks rather shabby. It's just another dwelling shoehorned into a line of row houses that marches up one of the Annapolis hills.

But inside, on the second floor, I have a nice little nest. It isn't big, barely more than a large efficiency, but an excellent hifi rig, several posters, expensive throw rugs, and good furniture have turned it into a home.

I turned on the low-level amber light, poured a couple of glasses of Mateus, and took my Goya out of its case. It didn't faze her, so I knew there was no sense in wasting anything difficult on her.

I played a few short pieces I had composed when I was younger, nothing fancy.

"Radcliffe," she said delightedly.

"I beg your pardon?"

"Radcliffe. Didn't he compose that music?"

"Yes, Yes, he did," I said, emphasizing the word he. "But how did you know?"

"Well, I . . . I . . ." she stutted, suddenly all flustered again.

"I must have heard it somewhere."

"Yes, I would imagine so. But where? I'd like to know."

"Well, why? What's so important about it?" Her laugh was nervous.

"Because I'm Dick Radcliffe. I wrote it."

She looked at me, her mouth slightly open, and a strange trapped look in her eyes. "You're Richard Radcliffe."

I nodded.

"Oh, that's marvelous."

"Well, I'm glad you think so. I'm not so sure I agree with you. Are you sure you don't know where you heard them?"

"Oh, I'd love to tell you if I

the feel of it.

I suggested places she could go: the Smithsonian buildings, Georgetown, the Phillips Gallery, Dupont Circle.

And we made plans to meet for lunch.

I felt embarrassed for some reason when I pulled into the parking lot I'd been using for two years, but the attendant acted as though I drove in with an attractive woman every day.

We walked to my office building. As I was saying goodbye to her, reminding her to meet me for lunch, she stretched up on her toes and kissed me lightly.

"Goodbye," she said, and was gone in the crowd of office workers hurrying to get to their desks.

I floated through the morning, but I came down hard when she wasn't waiting for me at lunchtime. All kinds of thoughts flitted through my head and they all dwelled on the possible meanings of that "goodbye."

But ten minutes later, she hurried up, all breathless and eager to tell me about her morning explorations. She told me how she had walked to Georgetown and gotten engrossed in the hippie shops, the sandal shop, the record stores.

"It's so picturesque!" she said breathlessly.

I took her to a small restaurant on Connecticut Avenue and, because we were so late, we had a hard time getting served. But that was all that much more time I could spend with her.

We parted as before, with a quick kiss and a promise to meet outside my office building at five.

We spent the evening walking the streets of Annapolis, looking at the boats, buying a bottle of red wine, and going to my apartment to listen to records and to communicate.

Our communication didn't require many words.

The pattern was repeated the next day and, during the weekend, we drove around Maryland and Virginia, visiting Great Falls and Skyline Drive.

Sometime during the next week, she moved in with me.

She had remarkably few clothes for a girl. She was able to carry them all in a small brand-new suitcase. She had two dresses, two skirts, a few tops, and lots of diaphanous underthings. She was the only girl I've known who bought those things for herself, although I'd bought them for my girlfriends in the past.

The next few months were filled with explorations of Maryland and Virginia that I'd never gone on by myself: from Fort Washington and Mount Vernon to the strip joints of The Block in Baltimore. We even took a weekend trip to New York City.

We spent a couple of afternoons looking for a machine shop that would draw and wrap the wire for her strings. We finally found one in Anacostia. It was going to be expensive.

It was all wonderful, and the most wonderful moments of all

were the simple ones, like the time we fed squirrels in Lafayette Park across from the White House.

**N**IKKI BURST into the apartment, her face alive with excitement. "It's finished, Dick, it's finished!"

"What's finished?" I asked as she whirled across the room and collapsed in the chair in a tangle of pretty legs and sexy lingerie.

"The guitar. Tom's finished the guitar."

I'd completely forgotten about it in the months we'd been together. I had hardly been to Tom's at all, but now I began to suspect that some of the times when she'd gone out alone, she'd gone to Tom's. It wasn't jealousy, mind you; I knew Nikki was interested in no one but me.

"We'll have to pick up the strings tomorrow," she said.

"Okay." I grinned. "I'm curious to see what this monstrosity of yours sounds like."

So the next day I took some of my annual leave and we stopped off at the machine shop in Anacostia.

She fussed over the guitar like a collie over a flock of sheep, her face furrowed in a frown as she tried to get it tuned just right.

"Couldn't you just get it in relative tune? Does it have to be in concert tune?" I asked.

She looked up at me, irritated. "What do you mean?" she snapped.

"Well, relative tune means that the guitar is in tune with itself. For example, instead of E, A, D, G, B, E, you might use F#, B, E, A, C#,

F#."

She frowned. "But I've got eight strings. Anyway, the notes and overtones have to be just right. It can't be off by a single resonance."

I didn't say anything. One of the few things I've learned in this world is not to argue with a woman.

So I went for a long walk, leaving her to her work. Naturally, my long walk took me to Tom's.

"Hi," he said as I walked in. "Be with you in a minute." He was aligning a couple of pieces of wood in a vise.

I wandered around the shop, smelling the sawdust and glue, touching the planed unvarnished pieces of wood, watching the strange interplay of shadows among the instruments. Memories of other guitar shops flitted through my mind, memories of the days when I thought I'd be a concert guitarist.

"Haven't seen you in a while, Dick. Been busy with that girl, Nikki?" He propped himself against a bench, pulled out a pipe, and started to tamp tobacco into it.

I grinned, embarrassed but happy, like a kid caught with his hand in the cookie jar. "Yeah. She's quite a wonderful girl."

"Yes, I guess she is." Tom lit a match and sucked in on the pipe. "But if you don't mind my saying it, Dick, she's a strange one."

"How do you mean?" I asked, feeling suddenly defensive.

"Have you looked closely at her guitar?"

I had to admit I hadn't.

could. But I can't. I honestly can't, Mr. Radcliffe."

"I wish you'd call me Dick," I said.

"Oh, I'm sorry. My name is Nikki. Nikki Wenz."

"I know," I said. "You gave Tom your name when you ordered your guitar last Saturday."

"Oh." She looked around, perhaps beginning to feel trapped with a strange man, in his apartment. She stared at the kitchenette, the drapes, the furniture.

"Would you like to go?" I asked.

"Where?"

"I mean, if you feel nervous here . . ."

"Oh, no. It's very interesting, being in a bachelor's apartment. Especially that of a famous composer."

"I'm not a famous composer."

"But you will be. I know it. You'll see." She had her smug assurance back.

"Glad to hear it." I started to tune the guitar back to standard.

"You're composing now, aren't you?"

"No, I've given that up. I work for the government."

"But you mustn't give it up, Dick. You're too good for that."

I sighed. "No, it's too tough a life for me, Nikki. I thought of becoming a concert guitarist once, but I'm just not that ambitious. So I got a degree in computer science instead."

She was silent for a while. "Maybe it's just as well. Maybe

you have to live a while longer, mature a bit. But don't give up composing for good, Dick; you've got too much talent."

If there ever was a conversation-stopper, that was it. We both sat there, not knowing what to say, both, I guess, a little embarrassed.

She held up her glass. "This is very good. Could I have some more, please?"

I refilled her glass and sat down again on the bed, facing her and examining her as she continued to examine my apartment. She wasn't particularly good-looking, but she had good legs, small exquisite breasts, and the most fantastically perfect skin. And there was an ingenuous air about her that wasn't broken even by her strange moments of bewilderment and suspicion. She had a natural grace that made me feel she would be at ease if she were stark naked in front of Congress.

"Don't you have a woman?" she asked suddenly.

"No. Not at the moment."

"Why?"

"I don't know." I busied myself with putting the Goya back in its case while I thought. "Most of the girls I grew up with are married, and so are the people I work with. I have no way of meeting single girls. So I just sort of stumble into them, like I did with you."

"Don't worry," she said. "You'll meet the love of your life soon. I know it."

I grinned. "Maybe I already have."



She looked at me blankly for a moment before the meaning sank in. Then she smiled very faintly. "No, I'm afraid not. But thank you for the thought, Dick."

I wasn't about to let her get off that easily. "Is there someone else?"

"No, not exactly."

"Then can I see you every now and then until I meet the . . . love of my life?"

She didn't even blush. I don't think she realized I was making fun of her. She just sat there, pensive. "I could use a ride into Washington, if you ever go there," she said at last.

"I work there."

"Then why do you live here? Washington is so far away."

"Not all that far. And I like Annapolis. It's so filled with the past." She nodded. "It gives me a sense of continuity with the past."

She looked at me as though I knew something I shouldn't. "What do you mean?" she asked sharply.

"Well, like when we were back at Tom's. I can see people dressed as they were a hundred years ago, almost as though nothing had changed."

She sat back in the chair. "Yes, Annapolis does have an air of timelessness." She smiled. "Almost as if it will be here forever."

"The way it is now."

She shook her head. "But some day there will be archaeologists puzzling over its ruins as they do over . . . what's that city?"

"Pompeii?"

"Is that where they fought the war over a girl?"

"No. Troy. Helen of Troy."

"Yes, that's the one."

There was another moment of petered-out conversation before I asked, "What do you want to go to Washington for?"

"Oh, I'm a historian. I've got a lot of research to do. That's why I'm here."

"You're a historian, and you forgot Helen of Troy?"

She got a little flustered again. "Well, my specialty is American history. It's been so long since I studied ancient history and it all got pushed out by new facts."

That didn't ring quite true to me. After all, I'm not a historian at all, but I know the story of Helen of Troy. Everyone does.

"You see, that's why we can't get too serious about each other. I'll be leaving in a couple of months."

"When?"

"Whenever I finish my research. There's so much I can do in Washington. That would be wonderful, Dick. Would you mind?"

Would I mind? Would I mind if my pay were doubled? Would I mind if Segovia were to take me on as a pupil?

I PICKED HER UP the next morning at the state legislature parking lot. She was wearing another minidress and carrying a small camera.

On the way to Washington on Route 50, a throughway, she told me how she planned to just walk around Washington at first, getting

"It's all wrong, Dick. It's all wrong. I'd like to hear what it sounds like when she has it strung."

"I'll tell her. But what do you mean, it's all wrong? Just because it has eight strings?"

"More than that. Here, look at these drawings. Nobody ever braced a guitar like that before. And the dimensions, the woods—well, it's just all wrong."

"Are you saying it won't play?"

"I don't know. The fretboard—the spacings are not for a twelve-tone scale. But she insisted on it."

"Well, we'll find out if it works pretty soon."

"What do you mean?"

"She's stringing it now."

"Tell her I'd like to hear her play it when she's finished." He picked up the neck of a fiddle and began sanding it down. "Tell her I'm very curious."

"I will."

I left Tom's shop and walked down to the Piraeus, the cobblestoned dock area of Annapolis town. The liquor store was still open; I went in and bought a bottle of the red wine that Nikki liked so much.

AS I CLIMBED the stairs I could hear Nikki playing. It was the most beautiful music I'd ever heard: there were resonances I'd never heard before, and the music itself was a cross between classical and jazz with an undercurrent of African rhythms and God knows what else. She stopped on a pensive and lonely minor chord.

I waited for a moment to see if there would be any more then opened the door. She was sitting cross-legged on the floor, her face bright with a wonderingly happy smile.

"God, Nikki, that was beautiful. I've never heard anything like it. What was it? Who wrote it?"

"What? Did you hear that?" Her voice was sharp with anger.

"Yes, I was just outside the door."

"Why didn't you come in? Why were you snooping on me?"

"I wasn't snooping on you." I had never seen Nikki angry before and I couldn't understand it now. "I just didn't want to interrupt you."

"Well, you shouldn't have done it. It was wrong."

"All right. I'm sorry." I was beginning to get a little hot under the collar myself.

"Don't do it again."

"All right, I won't," I snapped.

She got control of herself again. "I'm sorry, Dick. I didn't mean to yell at you. I just, well, I just don't like people snooping on me. It makes me nervous."

"I'm sorry. I won't do it again. Honest." She smiled at me, and how could I stay angry? We hugged each other and she cried a little and we both said "I'm sorry" again about half a dozen times until we almost got angry again over who should be sorry, and then we were laughing, partly out of the sheer relief of having weathered our first real argument.

"By the way," I said, putting the wine into the refrigerator, "Tom would like to hear you play."

"No."

"What do you mean, no? You owe it to him, Nikki. After all, he was good enough to make the guitar for you."

"I don't know. Let me think about it."

"He really would be surprised. I don't think either of us expected it to be such a beautiful instrument."

"Please, Dick. Let's talk about something else."

I should have dropped the subject there. "Just tell me what that was that you played."

"It's called 'Concerto for Guitar.'" Her voice was tense.

"It must be recent. I've never heard it before."

"Very."

"Who wrote it?"

"I . . . I can't tell you. I forget. Maybe I never knew. I don't know."

"I don't think you want to tell me, and I'd like to know why."

"It's none of your goddamned business!"

It was two days before we were talking to each other again without any tenseness.

NIKKI GAVE IN and agreed to play the guitar for Tom. But she insisted that he come over to our apartment. That was fine with me, because he had never been there before. He said nothing when he came in, but he nodded his head in approval.

Nikki gave him a glass of wine and he finally said, "The way you two are acting makes me feel I should bow to Mecca or something. What's with all this tiptoeing around like a couple of mice?"

"Sorry," Nikki said.

"Wait till you hear her play the guitar," I said.

Tom sat in the easy chair while I perched on the edge of the bed. Nikki sat on the floor, spent a few moments tuning the guitar, and finally began playing.

This time I recognized the piece: Tarrega's *Recuerdos de la Alhambra*. It wasn't nearly as beautiful or lovely as the thing she had played earlier, which still rattled around in my head, but it was the most enchanting version of Tarrega I'd ever heard.

When she was finished, I asked her who had transcribed it.

"What do you mean?" she asked.

"Well, that was written for six strings, not eight."

"Oh," she said, as if it had not occurred to her. "I don't know."

"Maybe it was the fellow who wrote that other piece, the one I first heard you play."

Nikki sat there, cradling her guitar, looking strangely miserable. "I don't know. Maybe. I just don't know." She was very near to tears.

"Play it for Tom," I suggested.

She shook her head.

"Why not?"

"I can't," she cried, and ran into the bathroom.

Tom drained his glass and left a few minutes later. I apologized to

him.

"Don't blame yourself, Dick. She's a strange girl."

"Hey, Nikki," I said after he left. "I'm sorry. I didn't mean to hurt you."

She came out of the bathroom, smiling bravely. "It's all right, Dick. Just don't ask me to play that piece again."

"All right. But why?"

"Just don't. Please. I can't tell you why."

Then she sidetracked me, and it was no longer a time for words.

A FEW NIGHTS LATER, we were sitting around, reading, watching television, acting very much like the old married couple, when she asked me to go out and get a bottle of wine.

"Are we out already?" I asked.

"I think so."

"Okay, let's go," I said. "It's a nice night for a walk."

"Could you go without me? I don't feel like getting dressed."

"What do you mean? That's silly. You can go as you are." She was wearing the same pale yellow dress she had worn the first time I saw her.

"I don't know. I just would rather stay in, that's all. Do you mind?"

I started to get angry again, but caught myself before I had said a word. "No, it's all right. I'll be back before you know I'm gone."

It was a beautiful night, the breeze off the bay keeping the summer heat at a tolerable level. The middies were walking around, in

groups of young men or paired off with town girls. The older townspeople were doing their evening shopping, and teenagers were looking aimlessly for something to do.

The Piraeus was alive with the traffic that always piles up there and the pleasure boats and cruisers were swarming with people. I didn't hurry but I didn't dawdle either. I bought the wine and walked back by Tom's shop, but I didn't stop in.

Nikki wasn't there when I got back.

I thought she was in the bathroom, so I hollered, "I'm back," and went into the kitchenette to open the wine. I poured a couple of glasses and sat down to watch TV.

That's when I noticed the bathroom door was open.

I called her name, but that was ridiculous, for there was no place for her to hide. But I did find a note:

Dick—

I'm sorry to leave you like this, without warning. But, if I didn't, you'd try to follow me, and I can't have that. Don't wait for me to come back or try to find me—you'll be wasting your time.

It's not that I don't love you, but it just wasn't meant to be. I can't explain.

I raced out of the apartment and, after darting around the streets and alleys for a few minutes, stopping

people to ask them if they'd seen a girl in a yellow dress and getting nothing but amused smiles, I paused to think.

I didn't know how long she'd been gone but she probably had packed and gone as soon as I left. It wouldn't have taken her more than ten minutes, so she had no more than a half hour start on me.

I went back and got my car and began driving around, stopping whenever I saw a short girl in a yellow dress.

I was driving down St. John's Street, beginning to believe that I'd never see her again, when I saw a girl in a yellow dress crossing the legislative parking lot to the road which led out of town to Route 50 and Washington. She was carrying a strange-looking guitar.

I stopped, backed up, stalled, turned around, and reached Bladen Street in time to see a Mustang stop to pick her up.

I stayed behind, watching the Mustang's tail lights, my chest tight and tense. My eyes were squinted up and they hurt as if they wanted to cry but didn't know how.

The Mustang followed the road to Route 50 and headed for Washington. A few miles later, at the bridge over South River, it pulled over to the side of the road.

There was nothing I could do: by the time I had caught up, the Mustang had pulled away and Nikki had run across the road, over the parkway dividing the traffic lanes, and into the woods on the other side of the highway.

I pulled over at the same place where the Mustang had and followed her.

There was a path through the woods on the bluff high over South River, and the full moon shining through the trees made it easy to follow. I could hear her ahead of me, running through the woods, making no attempt to be quiet.

Since I was able to follow her without making much noise, I was aware when she stopped.

"Chal?" I heard her say. There was no answer.

I crept forward, careful to be silent.

Then I heard the guitar: it made a flurry of notes, a quick melodic riff, and stopped. I heard a man's voice; I couldn't make out what he said, but I heard Nikki's name. My chest grew tight again.

"Chal, everything went all wrong. We're far too early; I broke the guitar and had to make a new one. I was afraid the overtones wouldn't be right and the gate wouldn't open. And I met Richard Radcliffe. Richard Radcliffe! And I loused up everything, Chal; I completely changed everything! What'll we do?"

The man, Chal, I guess, said something else, in a questioning tone of voice. I was able to make out what he was saying, but I couldn't understand a word. It was in some strange language. He used Nikki's name twice, and he seemed to be trying to calm her down.

She answered him in the same language, a little hesitantly at first,

LICENSED TO UNZ.ORG (continued on page 114)

# GREGORY BENFORD

*Greg Benford's most recent contribution of fiction to these pages was the novel, "Jupiter Project" (September & November, 1972). Since then he has become a regular contributor to the pages of Vertex and the science slicks. Now he returns with a story about a man who tried to beat the system and found himself a—*

## MAN IN A VICE

Illustrated by JEFF JONES

THE COLD seeped through my rough jacket. I hurried along the poorly lit mall, sensing the massive ice that lay just beyond the plastiform walls. That was when I first noticed the man with the scar.

Few patrons were out this early, nosing into the cramped shops or reading the gaudy neon adverts outside the clubs. Later the gambling would bring them in from their docked ships and the mall would fill. There would be noise and some singing, a brief flurry of fighting here and there, the calling of barkers. Dark women in filmy dresses would stroll casually for customers, making the men forget the chill of fifteen meters of snow overhead.

Thus it was that the scarred man stood out among the few idlers. He hurried, with that slight toeing in of the feet that comes of walking down

the narrow passages of a commercial submarine. I would have noticed him even without the scar on his face, because there was something furtive in his movements, some hint that he felt eyes on him.

In this place it was not at all unusual to see a scar, a tattoo or even a flesh wound, freshly made. Ross City was a free port, the only large one in Antarctica. Privateers and smugglers filled the coves.

Ross was a straitlaced American explorer of a century or so before. I am sure he would have reddened with outrage at some of the things which went on in the city that bore his name. Submarines with silenced screws were plying a steady trade in smuggled oil, running between the outlaw offshore rigs of Australia and the hungry markets of North and South America. Ross City,

tucked into a shelf jutting out from Mount Erebus, lies on a great circle between Australia and Chile. It was the natural focus of men skirting the law.

Smugglers had money—anyone dealing in scarce raw materials did, these days. They were willing to spend for a secure port to hole up in, particularly when the UN patrols were conducting their usually futile southern Pacific sweeps. The submariners lived with danger; a few close scrapes were a hazard of the trade. A scar in itself was not unusual; the man's manner was.

I decided to follow him. Perhaps the chill air made me reckless. Perhaps my skiing hadn't quite drained me of the random, unfocused energy a man acquires in a desk job. I told myself I was on holiday, bound for an evening slumming in the trader bars, and a bit of spice before serious drinking would not be out of place. I dug in my heels and went after him.

He ducked down a side passage. I turned the corner only a moment behind him. It was a short block, but my man had vanished. Into one of the shops? Several were day businesses, darkened. The others—

I glanced quickly into a dingy shrimp fry joint and didn't see him. The next brightly lit entrance was a homosexual restaurant/bar; the signifying emblem was prominently displayed. I passed it by—my man didn't look the sort, and he hadn't behaved as if on the way to an assignation.

There remained one doorway,





one that by chance I knew well. *Voyager Tavern* the blue neon proclaimed, though it was actually an alcohol and pill bar. I often put in here during an evening's rounds, searching for atmosphere. Some dangerous men are said to frequent the place, particularly in the back rooms. I came to the *Voyager* for the ample drinks and relaxed mood.

I hesitated, wondering if I should dash down the street and check beyond the next corner, and then pushed through the *Voyager's* door. I was right. My man stood only a few feet away, back to me. He looked slowly around the room, as if expecting to find someone he knew. He was taking his time doing it. Probably his eyes took a while to adjust to the dark, after the garish lighting outside. Mine did, too; but I knew the bar well and slipped silently around him, navigating by the low murmur of conversations more than the dim red lighting.

I chose a side booth with a good view of the room, sat and looked back at the scarred man. One of the *Voyager's* girls approached him with a graphic gesture, smiling from beneath impossibly long eyelashes. He waved a hand, brusquely dismissing her, and said something in a rasping voice. She shrugged and moved off.

The scarred man nodded at someone across the room from me and I followed his look. I was surprised: he nodded at an acquaintance of mine, Nigel Roberts. Nigel was playing cards with an array of scruffy men in kaki; he raised

a finger in salute and went back to studying his hand.

The man sniffed and continued to search the bar. He seemed to have an air of distance and reserve about him that was most atypical of the sort of man who became a smuggler. His face bore an expression that implied he felt himself above the customers in the bar and disliked being so distantly greeted by someone he knew.

"Hello," a woman's voice said. "On for an evening of pleasure?"

It was the same girl, again. I had been with her once before and found her competent but uninspired. I doubted if she remembered my face. I smiled, told her no, and she drifted away.

The movement attracted the man's attention. He peered at my table, squinting in the poor light, holding up a hand to block out the glare of a nearby lamp.

Then he saw me. His face froze with shock.

His wiry arms tensed suddenly and he glared at me with an intense, burning rage. He took three jerky steps forward, balling his fists.

I shifted my weight forward onto my feet. I lifted myself off the booth seat about an inch. The movement would be imperceptible in this light. I was ready to move to either side, which is about all one can do when attacked in a sitting position. I breathed deeply, setting myself automatically for whatever came.

Abruptly, he stopped.

The scar ran down from below

his ear to the very tip of his pointed chin. In this light it flamed a stark red. But even as I watched, it subsided and faded back into the pallor of his skin. He remained standing, weight set, frozen.

We gazed at one another for a long moment.

He flushed, lowering his eyes, and shook his head. He glanced up at me once more, as if to check and be sure I was not the man he had supposed. With a dry sound he shrugged, abruptly turned and marched into the back room of the bar.

As he moved through the pink patches of light and shadow I noticed that his scar was deeper near the throat, as though made by the blade of a knife coming from below. It was not fresh and bore the dark, mottled look of a deep cut that could not be readily corrected by a skin graft or even plastic tissue regeneration.

I sighed and settled back. He was probably calming himself in the back booths with one of the more potent—and illegal—drugs. My heart was pounding away, fueled by the adrenalin of a moment before. I had found the experience unsettling, for all its intriguing aspects, and I finished my first drink, when it came, with one long pull.

I had come into Ross City that evening for a break from the genteel monotony of the Mount Erebus resort, where I spent most of my holiday. The tourist value of Antarctica lies in the Mount's ski slopes and the endless plains of

blinding white. The sting of the incredible cold quickens my blood. I ski there yearly, rather than on the tailored and well known slopes in Eurasia or the Americas. Conditions there are quite pedestrian. Like all sports in this century, it has been rendered simple, safe and dull for the ant armies who want everything packaged and free of the unexpected. Near the great population centers—a phrase that includes virtually all the planet now—there is little risk and thus no true sport. For that, you come to Antarctica.

Unfortunately, the adventurers are seldom exceptional conversationalists and I found them boring. A week at the Erebus resort was more than enough to become saturated with tales of near-accidents, broken bindings at the critical wrong moment and slopes-I-have-known. So I took the tube down to the City, strolled through the red-light districts and ate in the ill-lit expatriate restaurants. It is perfectly safe even for a gentleman of my obvious affluence, for sportsmen and tourists are well treated. We bring in Free Dollars, which in turn create the economic margin that allows the City to remain a free port.

"Interesting one, eh?" Nigel said at my elbow.

The card game had broken up soon after the scarred man left, so Nigel came over to sit with me. I did not ask after his fortune. He didn't volunteer information, so he had lost again.

"Yes," I said. "For a moment he seemed to know me."

"I noticed. Come to think, you *do* look something like—"

"Who? The man who gave him that scar?"

"Well, it's a bit of a story, that scar and all."

"Fine. Let's have it. What are you drinking?"

When a snow frappe—laced with rum and cloves—had come for him, Nigel continued.

"He's a restless sort, that one. Name is Sapiro. Been on the subs for quite a time now. Hard to miss him with that scar, eh?—and he's not the type to be overlooked anyway. Always on the push, though I expect he's slowed down a bit now. Must've been born ambitious." Nigel's Australian accent inevitably gained the upper hand once he said more than two sentences at a go. I noticed he seemed nervous, drumming fingers on the table top and fidgeting with his glass. Perhaps his gambling losses had unsettled him.

"The man's done everything, at one time or another. Jobbed on an offshore rig, worked the fishing fleets, did some depth mining until the UN outlawed using amateurs in that game." Nigel looked at me with narrowed eyes. "Had a habit of rushing things, being a touch careless. He wanted to get places fast."

"He hasn't come very far, for all that."

"Ah, but you don't know."

"Know what?"

Nigel hesitated, as though deciding whether to tell me. His brow crinkled with thought. Why was the decision so important? This was simply a casual conversation. But somehow, underneath, I caught a thread of tension in Nigel. Did he have some personal stake in Sapiro?

Nigel looked at me across the table, fingering a napkin. Intently, with a sudden rush, he began:

"Sapiro started as a technical type. Computers. Worked for International Computational Syndicate."

"That is the combine with IBM as principal holder, isn't it?"

"Right. I'm sure you know what those outfits are like—regiments of stony-eyed executives, each one with a fractional share of a secretary, living in a company suburb and hob-nobbing with only company people. A closed life. Well, that's what Sapiro got himself into and for a while he didn't mind it. Fitted right in. All he wanted to do was get to the top and he didn't care what he wore or where he lived or what he had to say at cocktail parties to get there."

"But it didn't last."

"For a man like Sapiro ICS wasn't enough. Back in the 1990's, you know, that was when the white collar squeeze came on. Computers had caught up. Machines could do all the simple motor function jobs and then they started making simple executive decisions, like arranging routing schedules and production plans and handling

most of the complaints with automatic problem-solving circuits. That didn't leave any room for the ordinary pencil pusher and they started to wind up in the unemployment lines.

"Well, Sapiro wasn't playing in that low-caliber league, but he could feel the hot breath on his neck. He guessed the machines were always going to be getting better and the rest of his life would be a tough, flatout race to stay ahead of their capabilities."

"He was right," I said, sipping at my mug.

"Sure he was. Three quarters of the population can tell you that right now from firsthand experience.

"But ambition is a funny thing. Sapiro wanted his share of the loot—"

"I gather that was rather a lot."

"A fortune, nothing less. Enough to keep him above the herd for life, without him ever lifting a finger. You see, he wasn't hot for power or status. It was money he wanted. Once he had the money he'd get some status anyway, but it's not easy to keep those two separate these days. Once you've got a high living standard, you get a taste for status and power, they're the ones everybody's after. Funny."

"What did Sapiro do?" I said to hurry him along. Nigel had a tendency to lapse into philosophy in the middle of his stories.

"Well, he didn't want to fight the computers. So he looked for a way to use them. By this time he was a

minor executive baby-sitting for the experimental machine language division, overseeing their research and reporting back to the company. He had a brother-in-law in the same lab, a mathematician. They were good friends—Sapiro was married to the researcher's sister—but they didn't see much of each other in an official capacity.

"One evening they had the brother-in-law over to dinner and were sitting around talking shop. Everybody likes to make fun of computers, you know, and they were making jokes about them, figuring up schemes to make them break down and all that."

"Everybody is afraid of them," I said.

"Yes, I suppose that's it. Fear. They were tossing around ideas and having a good time when the brother-in-law—his name was Garner—thought up a new one. They kept kicking it around, getting a few laughs out of it, when they both suddenly realized that it would really work. There weren't any holes in it, as there were in most computer stories."

"This was a new vulnerability the designers had overlooked?" I said.

"Not exactly. The new machines ICS was putting together had a way they could be rigged and no one could tell that one little extra circuit had been built in. It never functioned in any other capacity, except the way Garner wanted it to.

"It worked like this. You start with your own computer, one of the new models. Give it a program to

execute. But instead of doing the job immediately, the machine waits a while and then, in the middle of somebody else's calculation, takes five or ten seconds out to do your work. You know what a random number generator is?"

"Well . . . it's some sort of program, isn't it? It produces a number at random and there is no way to tell what the next one will be. The first one might be a 6, next a 47, then a 13. But there is no way to tell what the next one will be."

"That's it. The time interval before your computer did your job would be random, so that the guy whose program came ten minutes after yours was supposedly done didn't *always* find 5 or 10 seconds missing. That made the trouble hard to trace, even if the other guy noticed he was losing a few seconds."

"But the kicker in all this is that Garner had found a way to charge those seconds to the account that was running at the time."

Oh, I see. That gave him free running time at someone else's expense. Very clever."

"Yes, but not quite clever enough. After all, he and Sapiro had access to only one or two computers. If they stole lots of time from the other users—and what would they do with it, anyway?—it would be noticed."

"Could they not sell the computer time to some other company?"

"Of course. But they couldn't steal much. It wouldn't be profitable enough to run the risk."

"I imagine the risk would be considerable, as well."

"Quite. You know as well as I what the cartels are doing these days. It was even tougher then. ICS owned Sapiro and Garner. As long as they were employed there the company could arrange their 'disappearance' and few would be the wiser. They lived in a company town that looked the other way when company goons dispensed justice. No, the risk wasn't worth it. The scope would have to be a lot bigger—and the profits—before they could afford to make the gamble."

Garner was the better technician but Sapiro knew the way management's mind worked. Any fool knew computer time was worth money. The corporations would take pains to be sure no one could make away with sizable chunks of it, chunks large enough to perform a respectable calculation. So Sapiro figured he'd do just the reverse of what ICS expected."

"Oh? I—"

"Here's what he did. He had to have Garner's help, of course, in hiding the initial program inside a complicated subroutine, so even a careful search wouldn't find it. That was Garner's only contribution and a good thing, too, because he wasn't a man who could deal with people. He knew nothing of character, couldn't tell a thief from a duke. Or so Sapiro thought."

"Then Sapiro—" I said. The only way to get Nigel to hold on the subject was to threaten to interrupt, a

theory which was quickly verified when he raised his voice a decibel and plunged on:

"The program he logged in instructed the computer to dial a seven digit telephone number at random. Now, most phones are operated by people. But quite a few belong to computers and are used to transfer information and programming instructions to other computers. Whenever a computer picks up the receiver—metaphorically, I mean—there's a special signal that says it's a computer, not a human. Another computer can recognize the signal, see.

Sapiro's computer just kept dialing at random, hanging up on humans, until it got a fellow computer of the same type as itself. Then it would send a signal that said in effect, 'Do this job and charge it to the charge number you were using when I called.' And then it would transmit the same program Sapiro had programmed into it."

"So that—" I said.

"Right on. The second computer would turn around and start calling at random intervals, trying to find another machine. Eventually it would."

"I see, much like the windup toy game."

"The what?"

"When I was a boy we used to wonder about those windup dummies one could buy. Suppose you got a bunch and fixed them so they would just walk to the next dummy and wind him up with the little screw on the back. I remember

once thinking that I could mobilize an entire windup toy army that way."

"Didn't work though, did it?"

"No." I smiled wryly. "I'm told the trouble lies in the energy. No dummy would have the power to wind up another to quite the same strength, so they would all run down pretty soon."

"Yup, that's it. Only with Sapiro the money to pay for the few seconds of computer time was coming out of all the accounts available to the computer, completely randomly. He was using somebody else's energy."

"I still don't see—"

"As soon as the program was in the machine and working he and Garner quit. Those were tough days and ICS didn't shed any tears to see them go. Their friends thought they were crazy for throwing up good jobs."

"How did they live?"

"Opened a computer consultant firm. Got no business, of course, but they were biding their time. All the while that one computer at ICS was dialing away, making a call about every twenty minutes. Pretty soon it had to find another soulmate, then there'd be two dialing."

Garner calculated it would take five months for half the ICS computers in North America to be reached. But before that programmers began to notice longer running times for standard jobs they'd set up, and people started to worry. The Sapiro program was buried deep and it was random, so every-

body figured the trouble was a basic fault of the ICS computer. A random symptom is always evidence that the machine is failing, they said."

"Enter, Sapiro and Garner, Consultants," I said.

"You got it. They volunteered to find the trouble for free the first time. Garner was smart enough to hide what he was doing and in an hour or so they straightened out the machine. Said they had a new method and couldn't reveal it. All they'd done was countermand the program that had been telephoned into the machine.

"That got them all the publicity they needed. They fixed a lot of ICS computers for incredible fees, only they did it through a cover agency so ICS wouldn't realize who they were.

"It worked fine because even after they'd debugged a machine, sometime or other another computer that hadn't been fixed would call up and transmit the orders again. They never ran out of customers.

Sapiro got rich and so did Garner, only Garner never seemed to show it. He didn't buy anything new or take his wife to Luna for a vacation. Sapiro figured it was just Garner's shyness. He didn't imagine his partner was saving it all up someplace where he could run when the time came. Sapiro didn't have much time to think about it anyway because he was working eighteen hour days, with assistants to do fake work as a blind. The

flunkies would go in, fiddle with the machine the way Sapiro had told them, and then Sapiro would pop in, dump the program—he called it VIRUS—and take off. The people who owned the machine never suspected anything because it looked like a complicated process; all those assistants were there for hours.

"Sapiro and Garner just flew around the hemisphere, selling their cure-all—Sapiro called it VACCINE—and making money.

"Then one night the ICS goons came after him. They weren't out for fun, either. They tried a sonic rifle at short range and the only thing that saved Sapiro was an accident—his copter fell into a lake, where the ICS goons couldn't reach him to finish him off. He floated on a seat cushion and kept his head low while they searched from shore. It was late fall and the water was leaching the warmth out of him. He waited as long as he could but the ICS agents didn't leave the shore line—they were just making sure.

"He started paddling. It was hard to make any time without splashing and attracting attention but the movement kept him warm a little longer—just enough to get him to the other end of the lake. It wasn't a lake, actually, but a reservoir. Sapiro heard a rushing of water and thought it was the edge of the falls. He tried to swim away but by that time he was too weak. He went over.

"But it wasn't the falls. It was an overflow spot that fell about ten



feet and then swirled away, taking him with it. The current carried him a half mile beyond the edge of the park area. He staggered up to the street, found a cab and used his credit cards to get to a hotel."

"He didn't go home?"

"No point. ICS had the house, his wife, everything. He checked by phone and found out several interesting things. That Garner hadn't come to work that day. That Garner's home numbers didn't answer. That his office was surrounded by ICS men.

"It took him three days to find Garner. He'd holed up somewhere and thought he was safe but Sapiro bought off a few people and tracked him.

"Garner had sold out to ICS, of course. The deal was that ICS wouldn't touch him after he handed over the information, but that didn't stick for Sapiro. When ICS saw what fools they'd been they went for blood and Sapiro was the nearest throat handy. They'd have killed Garner, too, if they'd known where he was.

"So after Sapiro took every Free Dollar Garner had—he was carrying it in solid cash, some jewelry and universal bank drafts, to be sure ICS didn't get it—he called ICS and told them where Garner was. He'd left Garner boarded in and tied up."

"Then it all resolved satisfactorily," I said. "He got his money and his freedom."

"Freedom, yes. Money, no. Sapiro ran for Australia and beat it

into the bush country. ICS never tracked him but they got some of the cash by good luck and Sapiro had to spend the rest of it to keep them off his tail. He had a year or two of good living but then it was gone. Even while he was spending it there was not much fun to it. ICS was still looking for him and by coincidence an agent ran into him in Sydney. Sapiro got the worst of the fight but he smashed the fellow's head when they both fell over a railing—he landed on top.

"That convinced him to lie low. It was about time he had to anyway because the money was almost gone. He got onto the offshore rigs and then into smuggling because it paid better. He's still doing it. He can't forget that he was once a big operator, though, and he looks down his nose a bit at the people he must associate with."

"Is that why he seemed a bit cold and reserved when he came in here?" I asked.

"Probably. He isn't a bad sort and he does tell a good joke. He would've come in and been sociable if he hadn't seen you."

"Why me?"

"He showed me some pictures from the ICS days once. One of them was of Garner. There's a fair resemblance between you two. Garner's hair was darker, but then it might have lightened with age."

"But ICS took care of him," I said.

"Maybe. Sapiro left him for ICS, but Garner might have gotten away or even talked his way out of it. Im-

probable, I'll grant, but it could have turned out that way.

"I don't think Sapiro is afraid of Garner at all, but you'll admit it must have been a shock for him to think he saw his old partner like that."

"Yes," I said, "I can well understand it. He gave me rather a start just by glaring at me."

"Good job he realized his mistake. Might have—"

"But look," I said. I was becoming impatient. "You said you would tell me about that scar. It's an awful thing, ought to have something done about it. How did Sapiro get it? When the copter crashed, or in the fight with the ICS man?"

"Ah yes, that. He's fond of the scar, you know. Wouldn't have it changed for anything, says it makes him look dashing. Stupid."

I raised an eyebrow. "Why? A man can allow himself a few eccentricities."

"Not a man like Sapiro. ICS can't afford to have someone still in circulation, living proof that ICS can be beaten. It might give some other ambitious chap an idea or two."

"But it's been years!" I said. "Surely—"

"The only sure thing is that ICS is big and Sapiro, however clever, is small. That, and his mouth is too large. He has told his story too many times, over too many drinks."

"The same way you're telling me, now."

Nigel smiled and the lines in his

face deepened in the dim light of the bar. "It doesn't matter now. Sapiro told his little tale to a man who needed money. A man who knew who to call at ICS."

I hesitated for a moment. I glanced toward the back room of the bar. A haze of pungent marijuana smoke was drifting lazily through the beaded curtain that shielded the back. Sapiro was probably quite far gone now, unable to react quickly.

"A man who gambles, you mean," I said slowly. "A man who fancies himself a shrewd hand at cards, but somehow cannot manage to get the best of the gaming tables here in Ross City and simply won't stay away from them."

Nigel regarded me coldly, unmoving. "Pipe dreams," he said, too casually.

"But our man still feels guilty about it, doesn't he? The old code about ratting out on friends—doesn't vanish so easily as you thought? So while you're waiting for the finish you tell an acquaintance about Sapiro, maybe thinking I will agree that he is a dishonest, stupid man who might as well be converted into cash for poor Nigel, the overdrawn gambler?"

"There's nothing for it, you know," he said grimly. "The scar's given him away back there. It wasn't hard to describe to them. By the time you could reach the curtain—"

Through the strands of colored beads, but somehow as though from far away, there came a faint

(continued on page 94)

# ROBERT F. YOUNG

*Robert F. Young (whose "Adventures of the Last Earthman in His Search for Love" appeared in our June, 1973, issue) is back with a brief and pointed story about a tomorrow in which the by-word is—*

## NO DEPOSIT\*NO REFILL

SHE CAME INTO the bedroom and sat down beside him on the bed. "Do you want to have sex with me, Max? Is that why you rang?"

"No. Not right away. I wanted to talk to you."

"Why?"

"Partly, I guess, because I feel alone."

"I feel alone too."

"You're merely reflecting my mood."

"Isn't that one of my functions? To reflect the way you feel?"

"I suppose so. Your hair looks lovely tonight. Have you been combing it again?"

"Yes."

"I like the way that little lock falls over your forehead. Like a sun shower."

"I didn't know there were showers on the sun."

"There are. Beautiful golden ones. Evidently the fact wasn't included in your data banks."

"Lots of facts weren't included in my data banks."

"But they contain everything you

need to know. You don't need to know about showers on the sun."

"What was it you wanted to talk to me about, Max?"

"Something important. I feel like talking anyway, and there's something I should tell you."

"Tell me then, Max."

"I don't really have to tell you ahead of time. I don't really have to tell you at all. I'm not bound to by law, or even by a moral code. But somehow I feel compelled to. I guess living with you all these months has caused me to feel, well, obligated toward you."

"That's silly, Max. You don't owe me anything."

"I know. I guess I must be growing old. Or maybe I belong back in the twentieth century—way back in the first half. In this day and age, men are supposed to be ultra-sophisticated. They don't get sentimental about printed circuits and talk-back tapes, no matter how attractive the package is they're wrapped in."

"Am I a nice package, Max?"

LICENSED TO UNZ.ORG

ELECTRONIC REPRODUCTION PROHIBITED

"The nicest I ever had."

"What's so special about me?"

"A lot of things. The way you walk. That look that sometimes comes into your eyes. The way you smile sort of slyly when it's time to go to bed. As though you'd thought up a new way to do it. A way a real girl never could."

"Whatever became of real girls, Max?"

"Nothing became of them. They're still around."

"Then how come I've never seen one?"

"You have seen one. The girl living in the next apartment is real. You've seen *her*."

"Yes, but I didn't know she was real. How *can* she be real? She sleeps with a real man, just like I do."

"You've got it turned around, Jane. He's the pseudo—not her. It works both ways. Haven't you ever noticed it's her, not him, who gets up in the morning and goes to work? Watch: he'll vanish from the scene one of these days, and there'll be a different one living there. That's the best way to tell for sure."

"Is that the way you tell for sure?"

"Generally. There are other ways, of course."

"But if there are real girls, why don't men live with *them*? How did it ever come about that they don't?"

"That inbuilt curiosity of yours is certainly working overtime tonight."

"I didn't even know I had one. Why should they put something

like that in me, Max?"

"To make you more personable. If you weren't curious, you wouldn't ask questions—even conversational ones like 'How do you like my new paper dress?' and 'Aren't I a nice piece?' If you didn't ask questions, we wouldn't be able to talk back and forth so easily."

"I did ask a question, and you didn't answer it. How did it ever come about that real men and real girls don't live together?"

"Partly because real girls sort of phased themselves out. They got it into their heads that all differences between the sexes, except physical ones (which they couldn't do anything about anyway) should be abolished. They wanted to be treated like men and to have the same rights as men and to be free from the sexual domination of men. In a way, they wanted to *be* men. Whether or not they were justified in taking such an attitude is beside the point: the point is, underneath their immaculate veneer most modern heterosexual males think of themselves as garbage cans, and the last thing in the world any of them wants to make love to is another garbage can."

"So all the men walked out on all the women—was that the way it happened?"

"It wasn't that simple. And it didn't happen that fast. Possibly it wouldn't have happened at all if breakthroughs in the fields of genetics and robotology hadn't taken place shortly after the Movement attained its goals. Once

it became possible to accomplish reproduction more efficiently by artificial than by natural methods, and once child-rearing became the province of professionals, the prime function of the ordinary woman became obsolete. Her ace in the hole vanished, and all she had left was the Queen of Hearts, which she was too proud—or too stubborn—to play. What really buried her once and for all, though, was the appearance on the market of a reasonably priced substitute.”

“Pseudo-girls, you mean. *We’re* why men walked out on her.”

“It goes deeper than that, and a lot farther back. It’s highly improbable that most men would have preferred pseudo-girls over real girls regardless of how mixed up the real girls were, *if the pseudo-girls hadn’t comprised a quality real girls lacked*—a quality perfectly attuned to the preconditioned attitude of the customer.”

“I only asked a simple question, Max. Why can’t you give me a simple answer? I don’t even know what a preconditioned attitude is.”

“It’s a way of looking at something before you know what the something is. The attitude I’m talking about was the natural byproduct of a runaway technology that had made manufacturing the new less expensive than repairing the old. It—the attitude—took root around the middle of the twentieth century, and grew and grew and grew. It had already reached maturity when Ani-Mates, Inc. brought out the first pseudo-girls.

Thanks to it, pseudo-girls (after the inevitable court-battles) became the rage, and real girls found themselves in freedom up to their necks.”

“But that was what real girls wanted, wasn’t it, Max? To be free. And if there are pseudo-men available as well as pseudo-girls, there’s certainly no reason for them to be lonely.”

“Sure they wanted to be free, and no, they’re not lonely. But they didn’t want to be free from men entirely. They wanted to have someone to take care of them while they were exercising their equality. And pseudo-men don’t work.”

“They’re like pseudo-girls, huh? They stay home all day and do the housekeeping and get dinner ready and—and things like that.”

“Right. Things like that. They’re nice to have around, but they’re a far cry from a hard-working husband.”

“I still don’t understand what a preconditioned attitude has to do with it.”

“It’s not necessary that you should, Jane. I just felt like talking—that’s all.”

“There was something you were going to tell me. Something you called me in here to tell me. Are you going to tell me now, or shall we have sex first?”

“I’ll tell you first, and then we’ll have sex. But like I said, I’m not duty-bound to tell you ahead of time, or for that matter to tell you at all. I’m going to have to turn you off, Jane. Do you know what I

mean by 'turning you off?'

"Yes."

"And you don't mind?"

"Why should I mind?"

"Well, you shouldn't, as far as that goes—you're guaranteed not to. It's just that when the time comes I always hate to do it. It doesn't seem fair somehow. Most men don't feel this way—most men are glad when the time comes. Some of them don't even wait. With them, the preconditioned attitude I told you about works full-time. With me, it doesn't. Like I said, I guess I belong back in the first half of the twentieth century. I won't pretend that doing it will have any lasting effect on me—it won't. I'm not that much out of tune. It's just that I hate to do it. But I can't put it off any longer because if I don't do it pretty soon I'll have to watch you die. And I wouldn't want that. You wouldn't want that either, would you, Jane?"

"No, I guess I wouldn't."

"So we'll have sex one more

time, and then I'll turn you off and everything will be all right."

"Are you going to try a redhead next?"

"Probably. Here, let me help you with your bra."

HAVING SEX FIRST made it easier. It always did. He carried the deactivated body into the kitchen and laid it on the floor. It was too big to go through the mouth of the disposal chute, and he had to dismember it first. He used the hack saw which he kept on hand for the purpose.

Afterward he watched 3v for a while, and had a few drinks. Then he went to bed. In the morning he threw away his throwaway pajamas and broke out a new throwaway business-suit. He drove to work in his throwaway car. On the way, he stopped off at the local branch of Ani-Mates, Inc. and put in an order for a custom-built redhead. A deluxe one.

—ROBERT F. YOUNG

---

Man in a Vice (continued from page 90)

scream. It had an odd bubbling edge to it, as if something was happening to the man's throat. Abruptly it became something else, something far worse, and suddenly ended.

The job was perfectly done. The terrible sound had never risen above the hum of conversation in the front room, never disturbed the layered smoke and drowsy mood. No head but mine had turned.

Quite professional.

Nigel was looking at me smugly; unconsciously, I had jumped to my feet. His face was losing its lines of strain.

"Finish your drink?" he said. "There's nothing more to do. What can any of us do, eh? Eh?"

I nodded and sank back into my seat. It was done. ICS had their man at last; they'd been satisfied.

I was free.

—GREGORY BENFORD

# MAMA LOVES YOU

*Behaviorist B. F. Skinner advocates raising children in a totally controlled environment, the "Skinner Box." But what if a child in such an environment tried to escape . . . ?*

## DALE RANGLES, JR.

"HENRY," the small, blond woman said to her husband, and then when he ignored her, "Henry Henderson, did you hear a noise from the nursery?"

With a bored expression on his distinguished face, he looked up from his faxsheet. "No I didn't. Watch your program, stop dreaming, and let me relax."

The woman flicked off the Tri-V and listened. "Henry, I'm sure I heard something."

"Then get up, and look."

"All right, I will," she said, walking hesitantly into the gleaming, automatic kitchen, which connected with the nursery. She paused to listen, and although she couldn't be sure, thought that she heard the soft snick of a closing door. Going to the nursery door, she unlocked it, paused once more to listen and then, slowly, timidly—opened it.

Her eyes were not used to the darkness, and the glare from the kitchen made it even more difficult to see, but, nevertheless, it was obvious that, except for "Papa," plugged

into the robocharger, there was no one there.

Should she enter the nursery itself and satisfy the vague fears which had moved her to come this far? No, she thought, it would be better not to. Henry would be furious.

When the Hendersons were married, thirty-six-year-old Mr. Henderson was already close to the top of the huge conglomerate, of which he now served as Chairman of the Board. When little Jimmy had been born, Henry had insisted on the robot nursery, patiently explaining that human beings were the worst possible rearers of children, passing on their neuroses in an endless chain of misery. But since robots do not have emotions, he explained, they could not become neurotic; thus the vicious cycle was broken. When the children were eighteen, he said, they would eliminate the robots, and the children would never know. Until then, however, she must never intrude into the nursery area.

He was right, she supposed. No

telling what an untrained snooper like me might do if I went in there now. She hesitated just a moment more and then closed the door and locked it, just in time to hear the irritated voice of her husband stab at her from the den. "Well, was anything wrong?"

"No, dear," she sighed as she walked back into the room. "It was nothing."

SIX YEAR OLD Jimmy Henderson looked up at the robot teacher in disgust. The droning voice had stopped and the boy knew that Teacher had tricked him again. Usually he was able to daydream his way through the five minute lectures and still wake up in time for the short tests which came in between. Teacher must have become suspicious this time, though, because it had failed to preface the test with its usual "Now Jimmy, tell me . . .," but had launched straight into the short questions.

Why couldn't Teacher understand that the short lecture/test program bored him and that he would rather dig the information out of the banks by himself? "Programmed instruction is the easiest, most efficient method of learning," Teacher always said, and that closed the matter. Nevertheless, Jimmy spent three or four hours every evening in the little library off the play yard reading up on the next day's subject, and, although he usually ignored the lectures, he always passed the tests with "hundreds."

"Jimmy," Teacher demanded, "you will please pay attention!"

The boy jerked out of his rumination and thought, Oh, no, now comes the "Mama loves you, Papa loves you, I love you" speech. And, sure enough, it did.

Jimmy bore up under the familiar onslaught until the Teacher got to the "I love you" part. "Oh, for crud sakes," the boy said, disgust filling him once more, "you're just a machine, - how can you 'love' anything?"

The teacher uttered a little squeak and Jimmy thought sarcastically that if it were possible, its single glittering blue 'eye' would have shed a tear.

"Just a machine?" the robot squawked, "I am the most sophisticated teaching device ever made by man."

"Phooey," Jimmy said, enjoying the creature's discomfort. "You're just a tin box full of transistors."

Another squeak came from the teacher's speaker grill and then it said gruffly, "All right, Jimmy, that is just about enough. You must be punished for your insolent disrespect. I am calling Mama."

Jimmy shivered when he realized that he'd gone too far in his teasing, but said, "Go ahead, I'll show you." The boy was only putting up a front, but, after he'd thought a moment, he decided that perhaps his row with Teacher was really a good thing after all. He and his sister Julie had not intended to put their plan into effect just yet, but, on the other hand, it couldn't be put



off forever, and this opportunity was too perfect to be ignored.

Jimmy leaped off the chair, and, for a moment, looked up at the teaching machine. Jimmy Henderson was small for his age and, from this angle, the teaching machine towered over him, a huge, blue-eyed cyclops. "What are you doing Jimmy?" Teacher asked.

Jimmy knew that off the chair, he was out of the robot's limited field of vision, so he ignored the machine and, going straight to the wall behind it, pulled the plug. Then he came around to examine the robot once more. The blue eye had died.

He stole softly to the door and listened. Just in time. Mama's familiar quick footsteps were approaching. He went to the side of the door and crouched down.

He held his breath for a moment, and then in one sudden swoosh, the knob turned and the door burst open. Mama always opened doors like that.

She took one step into the room and halted, calling softly, "Jimmy?" He did not give her time enough to see him, however, but slid swiftly under the arms that reached out for him, and skittered down the hall.

The boy was elated as he ran along the twisting corridor toward the play yard. He had planned it perfectly. Escaping Mama's grasp, at least for the moment, now at least he had a chance at success. In his mind, he could already see himself at the head of a column of righteous citizens, marching back

to rescue his sister. But that was in the future. For now, he had a good start on Mama, and, if Julie were in the play yard where she usually was at this hour, she would be able to give him more of the time that he needed if the plan were to work.

He ran along the twisting passage, avoiding the cul-de-sacs that made the nursery such a fascinating place to the two children and their robot playmates to hide-and-seek in. At one end of this hallway was the learning room, at the other, the children's living area and kitchen, beyond that, Mama and Papa's place. This forbidden area was his destination, since, Jimmy imagined, through it must be the way to the outside and to freedom for him and Julie.

Finally, Jimmy reached the play yard. This was an open area, surrounded by a fifteen foot high, inward sloping wall. He shouted with joy as he entered it, for there, seated in the sandbox with her robot playmate, Lolli, was blond little Julie.

He flopped down beside her, ignoring the questioning glitter of the little humanoid robot's eyes, but looking into Julie's beautiful shy blue ones and panting conspiratorily, "I'm activating the plan we talked about."

"But I thought you said it would be a long time from now . . ."

"I had to. She came to the learning room to punish me and the chance was too good to miss. Now, you know what you have to do. Delay her for as long as you can."

With this, Jimmy stood up, but, before he could take a step, he felt a sudden pressure on his ankle. He looked down and saw Lolli sprawled out, one hand firmly grasping his right leg, the other hand reaching for his left. Instinctively, he planted his right foot firmly in the sand, and swung the left with all his strength. The force of the kick sent Lolli's light aluminum frame flying. The robot landed on its back, a few feet away, the face smashed in, the glitter of the photocell-eyes extinguished.

Jimmy ran now, faster than he'd ever thought he could, knowing that if Mama caught him, she and Papa would really punish him. He shuddered inwardly with this thought as he ran into the hallway which led to his bedroom, and to the kitchen. To his satisfaction, he thought he heard Julie's voice in the distance crying, "Oh Mama, Lolli's hurt herself, help, oh, Help!"

Jimmy smiled at his sister's cleverness and hoped the ruse would keep Mama occupied for a while, since he had no way of knowing how long it would take him to get out of the house and free of her grasp.

He had to get out, for Julie's sake, if not his own. He only had a few more years before he would be sent to school, but for Julie it would be much longer, and, without his company, it would be unbearable for her.

Finally, the hallway ended, and he was in the kitchen. He had no money, and no idea how long he

would be "outside," so the first thing he did was to climb up on the counter and fill his sweatshirt with packages of food.

He climbed down, then, and for a second, looked at the door into the forbidden part of the house. This door was special, he knew, and wasn't meant to be opened by him, for he'd tried several times when no one was looking. But, even though it had no visible lock on it, the knob had never turned.

Luckily for him now, a few days ago when Papa had left after breakfast, and Mama had sent him off somewhat earlier than usual to the learning room for his session with Teacher, he'd had time to wait in the hall to peek around the corner. He had watched her open the door by placing one hand far up on the left-hand corner and the other on the knob, which had then turned easily.

Now, he got a chair from the kitchen table and placed it by the door. He laid his makeshift bundle on the counter and climbed up on the chair. Now he could reach the top of the door without any trouble, but the knob was another matter. He stretched his left hand upward as far as he could and managed to get three fingers of his right hand on the doorknob. Using friction alone, he was able to turn it half an inch. He then released his hold on the corner of the door and, getting a better grip, turned the knob the rest of the way. The door opened.

Hurriedly, he picked up his supplies and slipped through the

doorway.

The hall beyond was dark, except for a little light which came from beneath the door at either end of the hall, and from a curious, soft green glow near the middle of the passage.

Jimmy crept slowly down the hall, strangely subdued and edgy, despite his minor triumph in getting this far. The green light was coming from an alcove in the left side of the passageway. Contradictory feelings tugged at the boy as he neared the place. One part of him wanted to stare into the cubby to see what caused the strange radiance, but another part told him to go on by quickly without looking. As he neared the spot, a soft electric humming caught his ears, and he involuntarily looked into the niche in the wall—and just barely stifled a scream.

The sweatshirt flopped from his hands, and cans clattered as they rolled along the hallway. Jimmy stumbled to the door which, in spite of what he had just seen, he still hoped would lead outside.

The knob would not turn. He

backed up and looked at it in despair. Set into the knob was the one thing that Jimmy had not dared to think might be there—a keyhole. Unlike the door from the kitchen, this one was forever closed to him. He slumped down in the corner beside the door and slapped at it in frustration. What did it mean? He only knew that now he would never get out.

Then the door from the kitchen opened abruptly. Jimmy did not even look up as Mama walked heavily down the passage to him. The footsteps stopped and she said in her flat tone, "Come, Jimmy, it is time to go back now. It was silly to run away. Mama loves you."

Gently, and without effort, Mama's lily white arms lifted the boy and carried him past the alcove in which the "Papa" robot stood plugged into its bank of green-glowing dials. Jimmy looked up into Mama's face, and comprehension dawned. Like his, her eyes were blue, but in the darkness they glittered.

—DALE RANDLES, JR.

---

**ON SALE NOW IN JANUARY FANTASTIC**

**HOWARD L. MEYER'S** complete new short novel—**THE EARTH OF NENKUNAL**, **TED WHITE'S** new novelet, . . . **AND ANOTHER WORLD ABOVE**, the first of a new series about a new kind of sword & sorcery hero, **BARRYMALZBERG'S NETWORK**, **DAVID BUNCH'S—ALIEN**, **JANET FOX'S—SHE-BEAR**, **J. J. RUSS'S—THE INTERVIEW**, **SUSAN DOENIM'S—HEARTBURN IN HEAVEN**.

LICENSED TO UNZ.ORG  
ELECTRONIC REPRODUCTION PROHIBITED

Father (continued from page 49)  
succession.

"If they *do* take after me," he said to Zuni, "they should each weigh about eight pounds." She watched him, then placed a calming hand on his arm.

Mort Jason was standing to one side of the ectogenesis chambers, accompanied by a cameraman and sound recorder. The recorder was in a small pouch at Jason's waist; in his hand the reporter held a silver wand. They had given Jason the story as an exclusive in return for a sizable sum of money from his syndicate. Their decision had been motivated partly by fear of having the room overrun by reporters and partly by economic necessity. Paul would put his share in a fund for his children, but Hidey and Eli would need theirs to sustain themselves during their two-year suspension. Hidey, never one to save money, was so deeply in debt that few businesses would accept his money card without checking his bank. Emma, who had somehow hung on to her psychiatric practice in spite of adverse publicity, had refused her share.

The small laboratory next door was set aside as a temporary nursery. The clones would stay there for the next few days for observation and protection from infection. Then Paul would take his children home.

Hidey entered the room and closed the door behind him. He was the last to arrive. Outside in the hall, Paul could hear the chatter of reporters milling around and

waiting for pictures of the children after their "birth". Hidey walked over to Paul and grasped his hand.

"Did you bring a box of cigars with you?" he asked Paul.

"Nope."

"You should have." Hidey looked solemn then. "The Senate passed that bill last night. It'll be about as strict as the moratorium was. Now it goes to the House. It'll be law by October."

"Did anyone vote against it?" asked Bill.

"Garson and Jimenez," said Hidey. "I took the liberty of sending them each a telegram of thanks. They're finished politically."

Jabbar came up to them. "We're about ready," he said. Paul followed the two men over to the sink near the chambers and stood with them as they washed their hands in disinfectant. Nancy Portland was giving sterile face masks to all the people in the room. There weren't many of them: Jason and his cameraman, two lab assistants, Zuni and Bill, Emma Valois. Nancy handed Paul his mask.

"What are you doing with your money, Nancy?" he asked, trying to lose some of his nervousness in conversation.

"I am going to go to a health resort and try to lose weight, believe it or not. Then I'll come back here and dazzle every man in sight." She rolled her brown eyes in mock flirtation. "Or else I'll travel and eat at the world's best restaurants. I haven't decided."

Paul began to fasten his mask. "Don't get too thin, Nancy, you'll be malnourished."

"You're a sweetheart, Swenson. No one ever accused me of being malnourished." The heavy girl grinned at him.

Emma, Zuni and Bill had retreated to the far side of the room. Paul stood awkwardly next to Hidey, feeling useless but wanting to be as close as possible to the chambers. He could see the clones, fully formed now, curled in their wombs. Next to him on one of the lab tables were five small beaded bracelets for the children, each with a name: Edward, Michael, Albert, James and Kira. He had not given them unusual names feeling that they would have enough problems, and naming one Paul, Junior seemed inappropriate under the circumstances. I hope, he thought, I'll be able to tell the boys apart. Jabbar tapped him on the shoulder and Paul put on the white coat held out to him. Nancy had disappeared into the next room.

"We're ready," said Jabbar. Paul suddenly felt panic. *Wait*, he saw himself shouting, *are you sure? Have you checked everything?* Instead, he waited silently. He remembered stories of fathers who had psychological labor pains. He had never met one of those fathers. His muscles tensed.

Jabbar moved over to the first chamber and pulled a small lever on the console beneath it. Paul watched as the flexible material containing the infant began to open

at the side. Hidey reached in and gently removed the child. Jabbar cut the umbilical, then Hidey held the child by the legs as he patted his buttocks.

The infant, still covered partially by membrane, gave a lusty yell.

Paul trembled with relief. One of the assistants took the child into the next room to be bathed and placed in a bassinet. Then Jabbar moved to the next chamber and the second child, then the third. It all seemed so fast to Paul, the birth, the cry, the baby cradled in the arms of an assistant. He was trying to record all the details of each birth in his mind. *Someday I'll have to tell them about it.*

The last one removed from her chamber was the little girl but she made up for it by giving the loudest cry. Hidey took her into the room next door himself. Paul followed with the small beaded bracelets.

The small room had been equipped with sinks, five bassinets, and a small stove for preparing formula. Heavy plate glass divided the room in half, separating the place where the children were from the part of the room next to the hall. Reporters could enter the room from the hallway and see them without risking contamination.

Paul handed the bracelets to Jabbar for sterilization, then peered into the bassinets. They seemed so tiny and frail, these identical infants. He was almost afraid to touch them. Then he noticed that each had a tiny mole on the right shoulder, exactly like his own.

Their eyes were bright blue as all newborns' were, but within six months he would see his green eyes in each face, and brown hair on their presently bald heads. *This is what I looked like, exactly.*

"They're so small," he said at last. "Have they been weighed yet?"

Nancy Portland nodded. "Right after we brought them in here. The boys are eight pounds and two ounces each and the girl is seven pounds and fourteen ounces." Nancy scribbled something on the note pad she held. "How much did you weigh, Paul?"

"A little under eight pounds."

Nancy raised her eyebrows. "Score one point for the ectogenesis chamber. Not only does it work, which we already knew, it's an improvement." She wandered off and Paul looked back at his children. He hoped they would not grow up to believe they were only part of an experiment. That might be a difficult task.

Jabbar was at his side, holding out a bracelet. "Would you like to put these on them, Paul?"

"I'd be all thumbs. You'd better do it for me." Jabbar nodded. He attached Kira's first, then one around each boy's wrist.

The children were crying, not tearfully, but loudly nonetheless. Hidey came over to him and watched them. "They've got good lungs," he said, "and they definitely take after your side of the family."

"What other side is there?" said Paul, smiling.

"Well, we've done our job, Paul.

Now we just have to watch them grow up. What people do with these techniques may depend on what kind of people they become. That's a lot of responsibility to place on them, I know."

"It's a lot of responsibility for me as a parent, Hidey."

"You'll have plenty of assistance from Eli and me, we've got at least two years of spare time."

Paul leaned over Kira's bassinet. They were his children, yet closer to him than children. They were his twins, his brothers and sister too, separated from him only by age.

"Okay if we let in those reporters?" asked Hidey. "We gave them the word, no bright lights and keep the noise down."

"Fine," said Paul.

THE REPORTERS crowded together on the other side of the glass, cameras aimed, tape machines busy, a multi-legged, many-eyed, curious being. *They're just babies, Paul saw himself saying to them, not monsters or genetic freaks, just babies, make sure your cameras catch that.*

Instead he reached over for Kira and picked her up, cradling her tiny diapered form in his arms. She pouted at him, puffing her cheeks. "You'll be all right," he said to her.

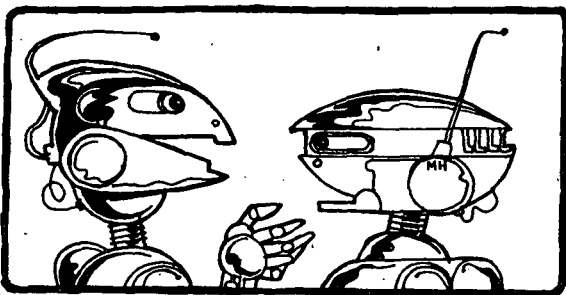
Then he held her out to the reporters and smiled defiantly. "My daughter," he said to them through the glass, and felt pride in the words.

Kira let out a loud cry.

—PAMELA SARGENT

**ED  
SMITH**

## **the Clubhouse**



IN THE ROUGHLY SEVEN MONTHS that I have been receiving a steady stream of fanzines for review in this column, I have been a little disappointed in their overall quality. I haven't received a large number of really fine fanzines; in fact, the two most consistently good fanzines I have been receiving are *Outworlds* and *REG/The Alien Critic*, both of which have varied in quality greatly from issue to issue or even from page to page. From talking to other fans and reading other fanzine review columns, I can see that it's not just that I'm not receiving some of the really good fanzines coming out today. There are not all that many being published.

A fairly large percentage of the fanzines that have come in within the past two months have had a heavy emphasis on science fiction, with book reviews and critical essays on sf as major items. There haven't been many fannish fanzines, unless one wants to count a whole new spate of personalzines—generally small, editor-written, and informal fanzines.

I have been receiving quite a few first and second issues recently, so perhaps this is a sign of the be-

ginings of a revival of interest in fanzine publishing. Many of these show the normal neofannish enthusiasm and with a little time may turn into really good zines. Reading one now, I am struck by unfamiliar names on the contents page and in the lettercolumn. Another new fanzine, arriving the same day, may have a completely different unfamiliar list of names. There are a lot of fans out there, so with any kind of luck something interesting might start happening.

In addition to the fanzines, it is nice to receive an occasional letter dealing with this column. I have received several letters recently, each of them offering some good comments and suggestions on my first two columns. My thanks to those who have written, and I hope even more of you do so in the future.

As usual, the fanzines reviewed are rated on a scale of from one to ten, with one being very bad indeed, five being about average and ten being excellent.

OUTWORLDS #17 (Bill and Joan Bowers, P.O. Box 148, Wadsworth, Ohio 44281; irregular, mimeo; 40

LICENSED TO UNZ.ORG

ELECTRONIC REPRODUCTION PROHIBITED



pp., until Dec. 31, '73—75 , 5/  
\$3.00, after Dec. 31, \$1.00, 5/\$4.00.  
August, 1973.)

This is the most 'modest' looking issue of *Outworlds* I have seen. Instead of foldout covers and other fancy graphic effects, this issue is all mimeographed, the layout is simple and pleasing to the eye, and there is very little concentration on artwork. It's an interesting change of pace, and I enjoyed it a lot.

The cover consists of the title and number of the magazine, and a reprinted (circa 1939) editorial by Richard Wilson. Despite the title prominently displayed at the bottom of the page, it took me a while to realize this was the new issue of *Outworlds*. It looked more like an extremely well-mimeographed issue of a fannish fanzine. It almost is, in the sense that it is in large part this issue a "fanzine about fanzines" to use a phrase Bill has used to describe his 'other' fanzine, *Fanzine Review*. In addition to Bill's usual editorial, he has a long article, originally written for a non-fannish audience, on "The Making of a Fanzine." It is both a good introduction for the neofan contemplating publishing and an interesting look into Bill's own thoughts as he plans an issue of his fanzine. From the factual side, he goes over the basics of fanzine production, such as methods of reproduction, getting material, etc. Getting into the area of layout, he starts telling us a little of how he goes about it:

"Not everyone has the drive or the opportunity to go to school for the express purpose of improving their fanzines, as I am doing. (I

probably couldn't stand the competition if they were!) But this has only been over the last year; before then, I was in the same boat as everyone else, and still my publications were receiving some acclaim as being graphically superior to most fanzines. Why? I don't think it was because of my training: I've been a draftsman which helped a little, but what relation has being a computer operator and an estimator, to a creative endeavor? Nor is it 'talent', although I like to think that I have a 'flair' for layout.

"What I have done is, in essence, looked over every publication of every sort that I buy or receive. Not with a magnifying glass, no! But with one thought in mind: if fan x or magazine y have an effect or layout that I like, I steal it if possible. (it isn't always . . .) and adapt it to my own use. I modify the techniques of others, and I like to think that I've invented a few of my own—at least insofar as their appearance in fanzines are concerned. And this is the way I have done what I have done. No mysticism; just a lot of observation, stubbornness, and working at it . . ."

Although I have said that the quality of material in *Outworlds* has varied greatly, he does have fairly regular columns from Poul Anderson and Robert A. W. Lowndes, both of whom always have something entertaining and thought-provoking to say. With each of these columns there is printed the introductions to the columns from *Outworlds* #8. Poul Anderson, on the policy of his



"Beer Mutterings." "It has no policy. It consists of a few brief items at a time, dealing with whatever I feel like. Occasionally this includes science fiction. Its appearances are irregular, and the reader must decide for himself how much truth, seriousness, and/or significance is in a given piece. Often there is none." That's a good policy for a good, rambling column. This issue Poul talks about Watergate, the "sexual revolution" (or lack of it) and peanut butter. R. A. W. Lowndes reminisces fondly about *Weird Tales* in a column up to his usual high standards.

There is a many-sided feud going on in the fanzine that tends to detract from its general air of 'good vibes': however, in this most recent instalment, even the participants have calmed down somewhat and adopted a more reasonable tone. A few years ago, many fanzines seemed to cultivate this sort of feuding, feeling that it added interest and excitement, perhaps, to a dull issue. I note with relief the passing of that trend.

In its last three or four issues, *Outworlds* has become one of my favorite fanzines. I now await each issue, wondering what will happen next.

Rating . . . 8.

HYPERION Vol. 4 No. 4 (Hyperion, c/o Libby Hatch, St. John's College, Annapolis, Md. 21404; quarterly, offset; 43 pp., 25 , 4/ \$1.00. Summer, 1973)

Science fiction is not the only field of interest that has produced its own fandom. It is not surprising

that rock music has its own fanzines, since there are certainly many more fans of rock music than of science fiction. Indeed, many sf fans, myself included, have an interest in rock and have written about it for our fanzines. Some sf fans have gotten heavily into rock music fandom (Greg Shaw and his fanzine *Who Put the Bomp* spring to mind instantly).

While browsing in a downtown Washington record shop, I came across an interesting rock fanzine, *Hyperion*. As I glanced through its pages I noticed some familiar names from "our" fandom, such as Dave Hulvey and Aljo Svoboda, as well as some from rock fandom and prodrom.

The layout and artwork gives the fanzine the appearance of being much more amateurish than it actually is once you get past the unappealing package. In fact, I enjoyed reading this fanzine more than I have most of the so-called professional rock magazines I have tried to read recently. The fanzine is written by a group of people who really love rock music, and write about it fondly and informally, rather than setting themselves up as Olympian arbiters of what people should like, as I've seen the professional rock writers do all too frequently. These people (Mark Jenkins is listed as the editor, along with a list of contributing and associate editors) are writing and publishing this magazine simply because they enjoy talking about their favorite music.

An interesting column on current singles by Charles Macaulay starts

the issue off, and there are album reviews at the back of the magazine. In between are articles on The Incredible String Band and the live performances of Lou Reed, comparing them to his recorded work. There is a hoax-review of "the new Rolling Stones LP" and I think some fanzine reviews and a short lettercolumn. I'm not really sure about these last two items because they are all done as part of a longer column, and none of it seems too coherent. I really can't tell, for example, where the lettercolumn leaves off and the other ramblings begin. I can't help but desire a little more order and coherency in some parts of the fanzine, yet I also wonder at the same time if that would destroy some of the general "fannish" feeling I get from it now. Well, there has to be a reasonable balance in there somewhere.

*Hyperion* seems to be basically oriented toward "punk-rock," at least as judged by this issue, but without most of the really hysterical ravings that have dulled my interest in the professional rock-mag *Creem*. Generally, this is a pretty good little fanzine. I'll be watching my record store for future issues.

Rating . . . 6½.

B.C. #5 (Railee Bothman, 1300 W. Adams, Kirkwood, MO. 63122 and Leigh Couch, #1 Cymry Lane, Rt. 2 Box 889, Arnold, MO.; irregular, mimeo; 34 pp, 25¢. Undated)

*B.C.* is basically a personalzine, but one with outside contributors and an interesting lettercolumn. From what I had heard of it (I had

not seen any previous issues) I thought it was entirely written by the co-editors. I think I would have preferred it to be entirely editor-written, with the exception of the lettercolumn. I find the writings of Railee and Leigh to be more interesting than the outside contributions. In fine personalzine style, they talk about themselves in an entertaining way, one that makes you feel you know them a little, and would like to know them better.

There are discussions in the fanzine about books, Woody Guthrie and age chauvinism, to randomly name three topics. Many more are covered. From the point of view of writing quality, it varies quite a bit, but most of the items are written in a friendly, informal manner that makes them enjoyable to read.

Basically, what I like about *B.C.* is that it radiates a friendliness that there could never be too much of in fandom. How pleasant it is to hear someone say that they are eagerly awaiting the worldcon, instead of complaining about the food at the convention banquet.

*B.C.* is a nice, unpretentious fanzine that is fun to read while relaxing.

Rating . . . 6

FAZZ BAZZ #2 (Murray Moore, Box 400, Norwich, Ontario, Canada NOJ 1P0; "roughly bi-monthly," mimeo; 17 pp., 25¢. August, 1973)

I suppose I have a slight prejudice against comic fanzines. The ones I have seen (admittedly a very small sampling) have not been very well

written, and the art and packaging have not particularly impressed me either. *Fazz Bazz* is different from most comic fanzines because, to quote the editorial: "the vast majority of comic fanzines emphasize art and visuals . . . *Fazz Bazz* is print oriented and interested in sharing viewpoints, ideas, stories and gossip." Because it is mimeographed instead of using (as most comic fanzines do) the more expensive offset, "the most it costs for *Fazz Bazz* is 25¢." It is also available for letters of comment, in trade for your fanzine, an article or a column.

The issue itself, however, seems a little insubstantial to me. In addition to the introductory remarks and a short, reasonably good lettercolumn, and a page of art, the only item in this issue is a trio of possible comic book scripts. Perhaps because my interest in comics is generally minimal (I mean, I read them occasionally, but that's about the extent of my involvement) I found it hard to get interested in the comic scripts. They may very well be quite good; I'll reserve judgment on them. So on the one hand I wonder how much of the discussion Murray Moore wants to start in his fanzine will be of interest to me, but at the same time I like the way he is going about it and wish him luck.

*Fazz Bazz* (a bad title, I think) features excellent mimeography, blue ink on golden and light green paper, and simple but attractive layout. I think the look, that of a more "fannish" type of comics fanzine, goes very well with what

the editor is trying to do with the fanzine's contents. It looks pleasant and approachable, the sort of fanzine one would not be afraid to write to.

Rating . . . 6

### *Other Fanzines*

STARSHIP TRIPE #4 (Michael Gorra, 199 Great Neck Road, Waterford, Conn. 06385; irregular, offset; 17 pp., 35¢. August, 1973)  
Rating . . . 3

TWILIGHT ZINE #27 (Jourcomm c/o MITSFS, W20-421, MIT, 84 Massachusetts Ave., Cambridge, Mass. 02139; irregular, offset; 40 pp., 25¢. Undated.)  
Rating . . . 4

RATAPLAN #11 (Leigh Edmonds, P.O. Box 74, Balacava, Victoria 3183, Australia; irregular, mimeo; 23 pp., 4/\$1.60. Undated.)  
Rating . . . 6

SOITGOZE #2 (Tim Marion, 614 72nd St., Newport News, Va. 23605; monthly, ditto; 22 pp., 5/\$1.00. July, 1973.)  
Rating . . . 4

WHATEVER #1 (Mark and Paula-Anne Anthony, P.O. Box 7241 Indian School Station, Phoenix, Ar. 85011; irregular, offset; 32 pp., 40 , 4/\$1.50. Easter, 1973.)  
Rating . . . 4

WYRD #1 (Leo Wagner, Box 82, Colon, Mich. 49040; irregular, mimeo; 32 pp., 60 , 4/\$2.25. June, 1973.)  
Rating . . . 3

VORPAL #1 (Richard Brandt, 4013 Sierra Dr., Mobile, Ala. 36609; irregular, mimeo; 24 pp., 35 , 3/\$1.00. July, 1973.)

(continued on page 129)

# the Future in Books



Robert A. Heinlein: *TIME ENOUGH FOR LOVE*, G. P. Putnam's Sons, New York, 1973, 605 pp. Hardcover, \$7.95.

*Time Enough for Love* is the capstone of the Heinlein "future history." On the "future history" chart you will find it listed at the very bottom as "Da Capo." It has been gestating for more than 30 years, and in the process, I suspect, has become quite a different book than that originally conceived. What might be called a non-novel novel, it comprises several essentially independent stories strung together on a two-pound-test plot. Considered as a whole—as a novel—it comes nowhere near the soaring standard set for speculative fiction by Heinlein himself. Ah, but the parts . . .

*Time Enough For Love* is the "abridged popular edition" of the official memoirs of Lazarus Long, oldest living member of the Human Race by virtue of a unique genetic inheritance, clonal and other rejuvenation techniques, and—most of all—a finely tuned sense of rational self-interest. (As most will re-

member, Long is the archetypal "third-stage Heinlein Individual" and the hero of *Methuselah's Children*.)

The book opens in 4272, more than 2,000 years after *H. sapiens* exploded out of the decaying womb of Earth into the endless frontier of the Galaxy and beyond. In that time Mankind has scattered to countless planets around countless stars, and still rolls on. No longer plagued by a closed-loop environment and, although still "the only [species] that is always dangerous even when not hungry," insulated from internecine war by the vastness of space, the race of "featherless bipeds" is virtually assured of immortality. Lazarus Long, the only man who has seen it all, has decided to cash in his chips. In his 2,360 years he has been virtually everything from slave to king. He has pioneered eight planets, survived at least one lynch mob and many wives, fought in 15 wars, made and lost numerous fortunes by almost as many means, and more, much more. There is nothing new left—except death.

However, he is persuaded to ac-

cept another rejuvenation in exchange for a search for something *really new*, a search conducted by an anthropomorphic computer named Minerva. Lazarus also agrees to impart for the record the accumulated wisdom of his twenty-four-century odyssey—although he snorts that “age does not bring wisdom. Often it merely changes simple stupidity into arrogant conceit.”

Eventually, Minerva turns up that something new: time travel into the past. Lazarus, his interest in living restored by rejuvenation and the possibilities of time tripping, decides to make his first journey into the past a return to his childhood days in the Kansas City, Missouri, of the 1920's (which is when and where Heinlein spent his teens). However, there is a glitch in his calculations and he lands in 1916, on the brink of America's entry into World War I. But before the war touches him, he meets, and falls in love with, his mother, experiencing something new—yet not so new—indeed!

As interesting and entertaining as this last episode of the book is, for me, what goes before is what makes *Time Enough For Love* worth reading. During his rejuvenation process, Lazarus tells three stories. One, “The Tale of the Man Who Was Too Lazy to Fail,” illustrates the essential connection between human progress and what Long/Heinlein calls the Principle of Least Effort. The other two, “The Tale of the Twins Who Weren't,” and “The Tale of the Adopted Daughter” (this one alone is worth

the price of admission!) are accounts of two major events in Long's life. These, together with lengthy aphoristic excerpts from Lazarus' notebooks, absorbingly limn the philosophy which made such a long and happy life possible, and which, I think, has served Lazarus' creator just as well—if not for quite so many years. (At any event, it is the philosophy Heinlein has been advancing in his fiction, implicitly and explicitly, since he began writing in 1939.)

Heinlein is a Social Darwinist whose moral first principle is racial survival. (“ . . . racial survival is the only universal morality, no other basic is possible.”) Racial survival depends upon freedom (“root, hog, or die”). It depends upon the creative efforts of an infinitesimally small fraction of humanity. (“Whenever this tiny minority is kept from creating, or . . . is driven out of a society, the people then slip back into abject poverty. This is known as ‘bad luck.’”) It requires frontiers. (“ . . . migration is a sorting device, a forced Darwinian selection, under which superior stock goes to the stars while culls stay at home and die.”) And, of course, it requires individual survival, which means living by the facts of the objective world (including one's own nature) rather than wishful thinking and mysticism—by being a “pessimist by policy and an optimist by temperament.” (“ . . . it is possible to be both . . . by never taking an unnecessary chance and by minimizing risks you can't avoid.”)

In addition to being a feast for those who have been yearning for some *good, new* story-telling by the master, and/or who share Heinlein's world-view, *Time Enough for Love* is a gold mine for the "future history" freak. It adds two millennia to the chart, painting with a broad brush and some detail the odyssey of Lazarus Long after the conclusion of *Methuselah's Children* in 2210. It also discloses the fate of the *Vanguard* and of Hugh Hoyland, Bill Ertz, Alan Mahoney and their women; offers a couple of answers concerning what happened when Lazarus and Andy Libby took on the Jockaira gods; and it adds to the canon—unfortunately, to my mind—*I Will Fear No Evil*. And, for the sticklers for detail, there are a couple of puzzles concerning Lazarus' age and the calculation of galactic time.

But this gives only a glimmering of the scope of this vast book, which is nothing less than Heinlein on the nature and destiny of Man. To quote George Ernsberger, "This book has the feeling of a valedictory. He broke out of traditional structure as if he wanted to get every last thing into it . . . ."

Consequently, the book suffers in spots from the overabundance of talk at the expense of action which has plagued Heinlein's more recent work. It also contains some uncomfortable jumps in voice and perspective which jarred me. However, these are minor problems. *Time Enough For Love* is a book well worth reading. It does what fiction should do and, these days, so rarely does: it

entertainingly grapples with truly important matters. It will make some people—hell; a lot of people!—angry, especially those infected with the utopian virus. But when has anything worth saying ever pleased more than a perceptive few?

—Karl T. Pflock

*The foregoing review, in slightly different form, first appeared in Books for Libertarians, a monthly review published at 422 First St., S.E., Washington, D.C., 20003, and is reprinted here with permission.*

Brian Aldiss: BILLION YEAR SPREE, Doubleday, New York 1973, 339 pp., hardbound, \$7.95; Jack Williamson: H. G. WELLS: CRITIC OF PROGRESS, Mirage Press, Baltimore 1973, 162 pp., hardbound, \$5.95

It would be hard to imagine two more dissimilar books on sf. One covers the entire history of sf, including many of its vague half-realized predecessors, while the other focuses not only upon a single author, but on a single (yet important) *trait* of that author. One book is aimed more at a commercial audience, and is thoroughly readable and enjoyable, while the other is quite dry and perhaps even pedantic, and originated as a doctoral thesis which was first published in *Riverside Quarterly*. One is by a British writer who first began producing sf in the fifties, and is known for his experimental work, while the other is by a writer

who started in the 1920's pulps, and has now turned college professor and academic. One book I can recommend to everybody; the other I have difficulty recommending even to the hard-core fanatic.

*Billion Year Spree* is the former book, and is quite worthwhile. A few issues ago, I reviewed J. O. Bailey's *Pilgrims Through Space and Time*, which was proclaimed as "the intellectual and literary history of science fiction" by its publisher—but was so hopelessly boring that it would promptly kill anyone's interest in the subject. The Aldiss book easily replaces *Pilgrims*; it not only contains more information and is more logically organized, but is also written in an entertaining style that will hold the reader's interest. It is not enough for a writer—of fiction or non-fiction—to have something important or unique to say; he must also say it well. Happily, this is something that Aldiss has realized.

Aldiss takes a position regarding the beginning of sf remarkably similar to that of Alexei & Cory Panshin, in that he believes sf neither began with the Greek, Lucian, nor with the founding of AMAZING STORIES in 1926, but rather with the publication of Mary Shelley's *Frankenstein* (1818), which he calls "the first true sf novel." *Frankenstein*, he says, is the first occasion in which the supernatural or magical as a cause for the unusual or fantastic is replaced by science. *Frankenstein's* monster was created by putting together pieces of corpses stolen from graves, not by summoning a

demon. Horror fantasy and sf appear to have sprung from similar graves, according to Aldiss.

One of the few faults of this book is Aldiss's tendency to spend too much time on authors and books which are only peripheral to sf and have been discussed extensively elsewhere, such as *Robinson Crusoe* and *Gulliver's Travels*. His inclusion of Franz Kafka and Thomas Hardy in this book also tends to seem like the efforts of someone trying to gain respectability for sf by mentioning Famous Authors, even though their relationship with sf is very tenuous. Contrast this with Aldiss's skimpy coverage of the 50's and 60's—but here I can sympathize with him, since so much of importance has happened to sf in the past two decades that it would be impossible for Aldiss to do justice to it in the amount of space he had available. His almost outline approach to these two decades makes one all the more aware of just how much sf is a contemporary genre, still experiencing growing pains.

The Williamson book on H. G. Wells is much less interesting; not because Williamson doesn't have anything important to say, but because he says it in a fashion which will make everyone but the most dedicated reader fall asleep in boredom. In my review of J. O. Bailey's *Pilgrims Through Space and Time*, I said that the only thing we had to fear from academia was that it would soon make us all grow bored with discussion of sf. Judging from the Williamson book, perhaps there's more to that than I origi-



nally thought.

Some of the things Williamson says about Wells are worth mentioning here. For instance, Williamson says that Wells saw progress as man's successful adaption to his environment, and that Wells' early sf seemed to serve as a sort of "imaginative laboratory" from which he worked out and tested sometimes conflicting ideas and attitudes. The idea that "progress" is man's successful adaption to his environment seems an odd one to me, since the opposite is more obviously true: progress is the successful adaption of man's environment to himself. If it is too cold outside, we put furnaces in our homes; if it is too hot, air conditioning. If the outside environment is too wet, we put up dikes and drain it; if too dry, we irrigate. We don't grow fur, or fans, or fins, or learn to live without water: we adapt our environment to more comfortably suit ourselves. Wells' idea of progress seems totally wrong.

Wells' notion of sf being an "imaginative laboratory" in which a writer can work out various ideas and attitudes rings more true. An sf writer is able to change the physical and social elements of his story's external environment in any way he likes—he has more control over the ingredients he wishes to experiment with, and is not forced to stick to the bounds of contemporary reality like the writer of realistic fiction. What effect will changes in our external environment—brought on by science, technology, the future, etc.—have

on mankind? This is the question which Wells seemed to be interested in answering while writing his science fiction, and it is one which every other sf writer is attempting to answer (consciously or unconsciously) when he starts banging away at his typewriter. A comment Aldiss makes at one point seems to be in direct agreement with this: "The greatest successes of sf are those which deal with man in relation to his changing surroundings and abilities: what might loosely be called *environmental fiction*."

Those completists and dedicated scholars who must have this book, even though it is very dry and boring, should order it direct from its publisher, Mirage Press, 5111 Liberty Heights, Baltimore, Maryland 21207, since it will be difficult to find elsewhere. And while I can't recommend *H. G. Wells: A Critic of Progress*, Mirage Press does publish many other fine books, and it is worth writing for a free catalog.

—Cy Chauvin

Roger Zelazny: *TODAY WE CHOOSE FACES*. Signet Books, New York, 1973. 174 pages, paperback (original), 95¢.

In the April, 1973, *FANTASTIC*, Alexei & Cory Panshin, in their column *SF in Dimension*, wrote: "Since *Lord of Light* in 1967, Zelazny has been floundering. He has produced a long series of thoroughly bad books. His skill with language, once his most at-



tractive feature, has seemingly deserted him." This is a sweeping statement which I don't believe is entirely true; nor is it completely fair to some of Zelazny's later efforts. The Panshins are correct when they intimate that works like *Jack of Shadows*, *Nine Princes in Amber*, and *The Guns of Avalon* do not have the thematic impact of earlier Zelazny novels; but the "Amber novels" of the past few years contain some fine prose which should not be overlooked. There are passages in *The Guns of Avalon* which flow and ride with smooth metaphors, crackle with jarring similes, and stimulate with original images. I agree with the Panshins, however, in the sense that Zelazny seems to have been in the literary doldrums for a while; and he is now past due for another important novel.

It is quite possible that the doldrums are just about over.

*Today We Choose Faces* is a damn good novel in many ways. It has action, suspense, and lots of complex twists of plot. It is the story of Angelo, a latter day mafioso, who is placed in cryogenic remission, and who awakens into a future of mystery, intrigue, and a kind of immortality that is not made clear until near the end of the novel. The actual plot is too involved to explain without tearing into the whole fabric of the book, but there are several other aspects of the novel which are worth exploring because of their close association with Zelazny's past works which earned him such high praise.

Immortality is one of Zelazny's favorite themes. It has appeared in most of his novels in one form or another: Conrad, Sandow, Frost, Corwin, Sam—all are manifestations of the man who may live forever. Zelazny seems to be intrigued with the idea of eternal life and the consequences of it. The difference between Angelo's brand of immortality and past Zelazny characters is the absence of any mythical or fantasy-like reasons for eternal life. Angelo is immortal because of the advanced technology to which he becomes heir. Life for the protagonist becomes a monstrous addition of experiences and personalities that at first confuse but eventually clarify Angelo's strange new existence.

The book is a science fiction novel—something that Zelazny hasn't written since *Damnation Alley*—and it surpasses that effort in every way. But it is also a questioning novel; Zelazny wonders about group identity, multiple consciousness, and the make-up of personality. He creates a complex matrix of perceptions, ideas, and memories which combine to produce a fast-moving and very intricate novel that challenges the reader to comprehend what is really happening here.

Zelazny's language comes on strong with little experimentation, just bold rushes of images crammed into lean crisp sentences. The reader is whisked along at a furious pace which only falters long enough for the protagonist to become involved with the always-present Zelazny female character: strong,

mysterious, semi-attractive, intelligent, yet obedient. Zelazny handles love interest better than most of us. Even when there is only incidental importance to the plot (in this case, the love affair is of prime importance), Zelazny comes through with maturity and just the right balance of rationale and sentiment.

I digress. The novel's language is clean and unfettered, and I suspect that there is a good reason for this. Zelazny constructed the novel in separate parts, which are then subdivided into smaller chapters. Each part and chapter fits together like an intricate puzzle, which makes

the plot and the action convoluted and very complex. Now if, in addition to such complexity, Zelazny also crammed lots of involved language into the book, it would definitely be a failure. Too much of too many things, even good things, can be disastrous. Thankfully, Zelazny recognizes this, and the novel works beautifully in its present form.

*Today We Choose Faces* represents Roger Zelazny's best work in many years. Perhaps it will be in the running for Hugo and Nebula awards this year. At least I hope so.

—Thomas F. Monteleone

Annapolis Town (continued from page 79)

then rapidly, fluently.

All this time I had been creeping quietly up the path. Now I could see her: she was in a small clearing in the woods, her pale yellow dress glowing in the moonlight. I couldn't see the man at all.

He said something else, but I still couldn't understand him though every word was perfectly clear. And I had no idea where he was.

Nikki said nothing, just stood there, shaking her head.

The man said something, questioningly.

Nikki answered and her voice sounded faintly choked. Then she said something else, louder and more sharply, but the note of despair in her voice made me want to rush out and hold her.

Her dress seemed to glitter in the moonlight, growing brighter and then fading. It seemed as though I could see through her. The moon

was shining right through, glowing on the grass beyond her.

And she was gone.

I rushed into the clearing, calling her name, but she was gone, guitar and all. There was no sign she had ever been there.

I SPEND VERY LITTLE TIME in my apartment now; I just sleep there. I spend a lot of time watching the sailboats on the Severn River. I talked Tom into making another eight-stringed guitar and the people in Anacostia are making another set of strings for me.

And I keep walking the streets of Annapolis town, looking for a girl in a pale yellow dress. Walking the streets of Annapolis town, with the notes to a concerto for eight-stringed guitar running through my mind.

—GRANT CARRINGTON

# WHY NOT SUBSCRIBE TO

First in Science Fiction Since 1926  
**amazing** SCIENCE FICTION STORIES

Only \$3.00 for one year (6 issues)

CLIP AND MAIL THIS MONEY-SAVING COUPON TODAY

Enter my subscription for **AMAZING STORIES**

6 Issues only \$3.00 .....

12 Issues only \$5.50 .....

Name .....

Address .....

City .....

State .....

Zip Code .....

(add \$1.00 per year for Canada and Pan American countries; and \$1.00 per year for all other foreign orders)

Mail to: **ULTIMATE PUB. CO., Box 7, Oakland Gardens, Flushing, N.Y. 11364**

## 38 CAL. SNUB NOSE

ONLY  
\$24.95



☐ 38  
Cal.

Special  
Snub Nose  
No permit  
Necessary

DEALERS  
WANTED

Protect yourself against Muggers and Holdup Men. Steel Replica. Send \$24.95 plus \$1.00 Postage & handling to: **GENERAL PRODUCTS Co., 162 Amherst St., East Orange, N.J. 07019. Box 2098 Dept. SFA-1**

Name .....

Address .....

Apt. # .....

City .....

State .....

Zip .....



## Poems Needed FOR SONGS & RECORDS

**PUBLISHING CONTRACT** guaranteed on selected material. Send your best poems or songs for **FREE** evaluation to: **HOLLYWOOD SONGWRITERS SERVICE, Dept. U-18, 6253 Hollywood Blvd., Suite 1117, Hollywood, Calif. 90028** (Corner Hollywood & Vine)

## BE TALLER 2" TO 4"

Compilation of latest secret illusionary methods, devices, height increasers, lifts, etc. Don't stay short. **ADD INCHES TO YOUR HEIGHT.** Send \$1.00 to: **Physical Culture Products (UFT2) Box 1548, Pompano Beach, Fla. 33061**



**FOR SONGS  
WE NEED NEW IDEAS  
FOR RECORDING  
YOUR SONGS OR POEMS MAY  
EARN MONEY FOR YOU  
FREE EXAMINATION**

MAIL TO **COLUMBINE RECORDS** Dept SF-2  
1601 N. GOWER, HOLLYWOOD, CALIF. 90028

LICENSED TO UNZ.GR  
ELECTRONIC REPRODUCTION PROHIBITED

Editorial (continued from page 4)

precision, but which I would like to paraphrase as best my memory allows me, because I agree with it so completely.

The World Science Fiction Convention (said Lester) is a gathering of those of us who love science fiction. It is not a trade convention, nor a business-place for professional wheeling and dealing, although these aspects are rarely completely absent. The people who work to put on these Worldcons are fans, who do it without pay, for the pleasure of their accomplishment. Those of us—writers, editors, artists and just plain readers alike—who attend a Worldcon do so as fans, sharing our love of science fiction with each other. Here we find a common ground amid our diversity. Here we are all—proudly—science fiction fans.

The Torcon 2 was run by fans, for fans, and because the Committee was fully aware of this, the Torcon 2 was an enormous success. It was a success not only in terms of attendance, but in terms of individual satisfaction on the part of almost every attendee.

And the Royal York hotel was a superb hotel. The attitude—perhaps Canadian—of the entire staff was gracious and friendly, and when Lester, as Toastmaster at the Awards Banquet, called for a hand for the hotel the entire body of us rose instead to give the hotel a standing ovation. (When one contrasts this with previous Worldcons—where the banquet toastmaster sometimes spent his opening remarks excoriating the hotel and its staff, usually with considerable

justice—the quality of the hotel is underscored.)

**THE HUGO AWARDS:** As promised, here are the winners (and second- and third-places) of this year's Hugo Awards:

*Best Novel:*

- The Gods Themselves* by Isaac Asimov  
(2. *When Harlie Was One* by David Gerrold)  
(3. *There Will Be Time* by Poul Anderson)

*Best Novella:*

- "The Word for World is Forest" by Ursula K. LeGuin  
(2. "The Gold at the Starbow's End" by Frederik Pohl)  
(3. "The Fifth Head of Cerberus" by Gene Wolfe)

*Best Novelette:*

- "Goat Song" by Poul Anderson  
(2. "Patron of the Arts" by William Rotsler)  
(3. "Basilisk" by Harlan Ellison)

*Best Short Story:*

- "Eurema's Dam" by R. A. Lafferty  
tied with "The Meeting" by Pohl & Kornbluth  
(2. "When We Went to See the End of the World" by Robert Silverberg)  
(3. "And I Awoke And Found Me Here on the Cold Hill's Side" by James Tiptree, Jr.)

*Best Dramatic Presentation:*

- Slaughter-House 5*  
(2. *The People*)  
(3. *Silent Running*)

*Best Editor:*

- Ben Bova  
(2. Donald A. Wollheim)  
(3. Ted White)

**Best Professional Artist:**

- Frank Kelly Freas  
(2. Jack Gaughan)  
(3. John Schoenherr)

**Best Fanzine:**

- Energumen* published by Michael & Susan Glicksohn  
(2. *Locus* published by Dena & Charlie Brown)  
(3. *Algol* published by Andrew Porter)

**Best Fan Writer:**

- Terry Carr  
(2. Susan Glicksohn)  
(3. Richard E. Geis)

**Best Fan Artist:**

- Tim Kirk  
(2. William Rotsler)  
(3. Grant Canfield)

I won't remark at length on these awards—they speak for themselves—but I should note that Mike Hinge, whose covers have graced AMAZING and FANTASTIC over the last few years, was (for the first time) a nominee for Best Professional Artist, although he did not place in the top three. And my own showing, in the Best Professional Editor category (which made its first appearance in the awards structure this year), is precisely the same (third place) as that which AMAZING occupied for the previous three years, when there was a category for Best Professional SF Magazine. I'm beginning to feel myself to be in a rut . . .

NAOMI POSTAL: On the day following the last day of the Torcon 2, on September 4, 1973, my wife and I received the sudden and shocking news that her mother,

Naomi Postal, had died.

We were still in the hotel, in the process of checking out, when the call came from Port Perry, a small town about 60 miles north and east of Toronto, where the Postal family was staying.

There had been virtually no warning. My wife, Robin, and our three-year-old daughter, Arielle, had been in Port Perry only the night before, and Naomi was complaining only of a "touch of summer virus or flu," although it was obvious that she was not in the best of health. It required an autopsy (required by Canadian law) to reveal that her death was caused by unforeseen complication from a routine operation she had undergone a year earlier. The ultimate result of this complication was gangrene, blood poisoning, and death. The operation was one her doctor had insisted upon, but which, upon sober reflection (and with the benefit of hindsight) might have been unnecessary.

Although Naomi Postal was my mother-in-law, I never associated her with the jokes popularly made about mothers-in-law. She was an enormously warm and vibrant person, and in the twelve years I had known her I had come to respect and to love her greatly.

A former teacher, she had at mid-life changed careers to become a librarian, quickly promoted up from the ranks in the New York Public Library system to Assistant in charge of the Picture Collection at 42nd St. and 5th Ave., at the main branch of the New York Public Library. Her interest in books was

intense and she was quite pleased to have an author of books for a son-in-law. We spent many hours discussing the books we'd read and when my *Star Wolf* was published I dedicated it to her: "This one's for Naomi, who asked for it." I'm glad I did—it was the last novel I published before her death. (And in large measure I did write the book for her—my 'Qar series' was her favorite among the books I'd written.)

Naomi was only 56 when she died, and had she not suffered the complication I mentioned, her health would, I am sure, have carried her forward in good spirits for a great many years to come. So we expected, at any rate. Yet, she had lived a good and rewarding life, raised both a son and a daughter to adulthood, enjoyed a granddaughter by each, and her marriage of thirty-six years to Julius Postal was one in which she still rejoiced to her last day. Hers was a life of few regrets and much happiness. We can only regret its untimely end.

ON THE IMPOSSIBILITY of Keeping Ahead Of the Game: A note just received from John Brunner says, in part, "In *The Stone that Never Came Down* I included a descrip-

tion of an attack by 'godheads'—militant / fundamentalist Christians—on a gay club, resulting in the death of Billy Cohen.

"Broadcast recently on TV here in Britain was an interview with Rev. Troy Perry, pastor of a gay church in Los Angeles. It took place in front of the burned-out ruin of what had been his church's headquarters. Asked by the interviewer, Alan Whicker, to make a guess concerning those responsible, he identified as among the most dangerous and harmful of his opponents' . . . yes, you guessed it: the Jesus Freaks.

"It really has become impossible—no kidding—for us SF writers to invent anything worse than what is bound to appear in tomorrow's news."

In his Sunday afternoon keynote speech at the Torcon, John called for a more optimistic approach to the problems foreseen in science fiction. "I simply got tired of writing downbeat stories," he remarked. "I decided I wanted to write a story with at least a little hope in its resolution." The story he was referring to? *The Stone that Never Came Down*, serialized here in our October and December, 1973, issues, the first instalment of which was then on sale.

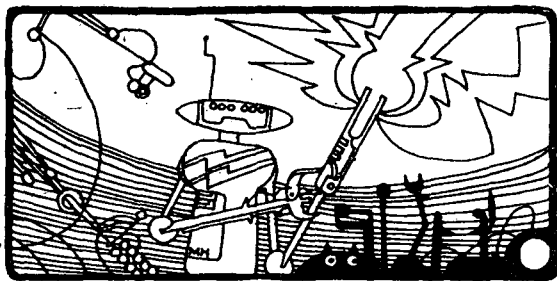
—TED WHITE

---

### ON SALE JANUARY 15th IN FANTASTIC

The first installment of BRIAN ALDISS greatest new novel—**FRANKENSTEIN UNBOUND**, R. FARADAY NELSON'S—**THE CITY OF THE CROCODILE**, BARRY MALZBERG'S—**AT THE INSTITUTE**, DAVID BUNCH'S—**SHORT TIME AT THE PEARLY GATES**, F. M. BUSBY'S—**I'M GOING TO GET YOU**, and many more new stories and features:

# ...OR SO YOU SAY



Letters intended for publication must be typed, double-spaced, on one side of each sheet, and addressed to *Or So You Say*, Box 409, Falls Church, Va., 22046.

*Before beginning with the letters this time I must explain that recent changes in typesize, dictated by our typesetter, have played havoc with this column. The letters published in our last three issues were all originally set for the August, 1973, issue, and, as a consequence, became increasingly dated as they were published in the October and December issues. This issue we must, perforce, catch up with the more important letters which have arrived in the interim; next issue, I hope, we'll be caught up once more.—TW*

Dear Ted,

I just finished the last story in your January issue; I would like to compliment you on an excellent issue. I personally find some solace in the fact that the authors you publish tend to be little known or

new writers, and, though I expect it is so, I rather hope that these stories are not the castoffs of other mags. But if they are, then that is the other magazines' loss.

But now to my point. I have a slight bone to pick with David Book involving his Minkowski diagrams. I noticed that on Fig. 4, Dave has  $t'x'$  lying on the  $x$  axis. This would be fine as far as I'm concerned, except that he has stated that the man traveling by the prime coordinates is four light seconds behind his control stationary subject. Now by this Dave is assuming that  $O = O'$ . Fine if they are traveling at equal rates. But since our friend in the ship is slower than the stationary subject then  $O = O'!$  This is of course assuming that  $t = t'$ , which should be obvious.

To put it in simple terms, Dave's diagram shows that the origins of both graphs lie on the  $x$ -axis when patently they do not. The origin of the  $t'x'$  graph should be graphed the equivalent of four light seconds above the  $tx$  graph in order to compensate for the time dilation of the

LICENSED TO UNZ.ORG

ELECTRONIC REPRODUCTION PROHIBITED

fellow in the spaceship. If the line is then drawn from the point of transmission it will intersect tx graph at the origin, and hence no paradox occurs.

Of course, my calculations may be wrong, and they probably are, but I thought I should point this out anyway.

Extremely fascinating article, however, and I am sad to see Dave leave you. Knowing the quality of Greg Benford's work, I don't expect any drop in the quality of the column.

ANTHONY SELLARS

4621 SE 26

Del City, Oklahoma, 73115

*David Book replies: -*

There is a confusion of intent here, I think. If we sit in *A*'s frame of reference and wait long enough, eventually *B* will be four light seconds away, as shown in Figure 4. I define this to be time zero, and *A* starts his clock at that instant. *B* can calculate when *A* is going to do this, using his (*B*'s) own standards. He finds that it does *not* happen when *A* seems to him to be four light seconds away, but that doesn't matter. By prior agreement, he starts his clock when he is at the point *A* calls four light seconds away. This is the content of Figure 4. Raising or lowering the origin of one coordinate system just corresponds to a different definition.

*And, in response to two letters in our August issue, also discussing the same Science in Science Fiction column, Book offers the following response:*

My position is, of course, entrenched. I am on record as a tachyon unbeliever. But I hope readers Powell and Beth did not get the impression that my co-authors and I think we have *proved* tachyons do not exist. We just showed why we disbelieve in them. We felt the arguments presented in our original article would strike most other physicists as similarly compelling.

I urge Dr. Powell to explore further the implications of a "broadened concept of causality." The notions of cause and effect, were they excised from our sensibilities and replaced with that of undirected causal relationship, would leave a great vacuum. The nearest I can come to imagining what it would feel like is my recollection of the first time I handled an airplane's controls in flight. I couldn't predict what the plane would do in response to my actions. Sometimes it did the opposite of what I expected, and I responded by reversing what I had done. About half the time the plane seemed to be flying me. Naturally, this was illusory; if it were really the case, no one would ever learn to fly.

The second law of thermodynamics is a red herring here (we didn't mention it). We did say that, if tachyons behaved as *B* & *S* claimed, one could build an anti-telephone, leading to genuine paradoxes. So we concluded that tachyons, if they exist, don't behave that way. (Which means, we don't think they exist. But if someone else comes up with a new theory without associated paradoxes, we'd re-



consider.)

That brings me up to reader Beth's comments. I am much more upset at the prospect of a paradox in nature than he is. It is important to distinguish between a real paradox (something *is* if and only if it is *not*) and an event which merely contradicts our expectations. Electrons that orbit nuclei without radiating were never paradoxical, in the former sense; they were just impossible to understand on the basis of "classical" physics. If the experiments inspired by B & S find a positive result, that would be similarly hard to understand, but it would not be a paradox.

Such tachyons could be used to build a backward-in-time communicator, however; at least, I don't see why not. *That* has paradoxical implications. Nothing I know in the world behaves in a paradoxical fashion, and I'm willing to bet nothing ever will. That's why I predict no tachyons will ever be found. I predict the experiments will fail and the theories will die a natural death.

DAVID BOOK  
Washington, D.C.

Dear Ted:

I was interested in Larry Carroll's comments. [FANTASTIC, Sept., 1973] on the projection Dave Book and I did for computer generated movies. I am glad Larry thinks the principle we set forth—electrons are cheaper to move than people—seems to have made its impact, and I am rather surprised that the art of generating films from computer images is as far-advanced

as he said. However, David and I were not unaware that the translation of images to computer-manipulable form and back again was around long before computers themselves. But it still seems to me that it is rather a long way from doing detailed intensifications of the Mars Mariner photos to making a realistic, color film that looks real to the human eye. True, there is probably no difference of kind here, but there is probably a vast difference in the amount of computer storage required. That is why Book and I predicted the 1980's for the emergence of a commercial computer animation system. We simply felt that, while cartoons might be drawn by computer, making facsimile movies required at least another order of magnitude investment in storage space.

Of course, Book and I could be quite wrong. But Larry Carroll doesn't really disagree with us on the eventual outcome, only the time scale. I share his confidence that special effects and computer-generated images are going to make films into incredible visual experiences. However, I rather disagree with him that this will necessarily give us better films. As long as movies are made by people with limited imagination and limited sensitivity, we will continue to get things like the film *Silent Running*. Here is where I disagree with Larry; I thought this film had some respectable special effects, but was embarrassingly badly done otherwise. The acting was sophomoric, the plotting both was

unbelievable and made no sense, and the technical ingredients were simply laughable. I thought the crowning touch was the terrible flight through rings of Saturn, which seemed to go on forever and did relatively slight damage to the ship. The rings of Saturn are probably no more than a few miles thick and they contain rather large rocks—sometimes several feet on a side. Any ship built for high vacuum maneuvering would be annihilated as it passed through the rings of Saturn, and this passage would last only a short time—assuming the ship did not run into the rings edge on, which is pretty unlikely.

However, I do think that films in general (and very probably SF films, too) will get better. This is because intelligent people like Larry are going into this work at last, and the presence of excellent work in the past acts as a counterweight against shoddy work in the present. Therefore *2001* will tend to keep the standard up, even though films like *Silent Running* will pull it down: I am gambling that over the long run *2001* has much more influence. Of course, this leaves aside television. TV has had a terrible struggle to get above the pabulum stage of entertainment, and I expect when SF dramas begin running regularly on television they will have to undergo the same sort of evolution that other genres have encountered. I hope this isn't so, and having people who do know which way is up—like Harlan Ellison—will help, but only as long as they are listened to in the corridors of power at CBS, NBC

and ABC. Again, the classic problem of science fiction is that most of its audience is young (because they are the ones with imagination) and they do not have very well developed sensibilities.

Recently you have had a few letters about the article David Book wrote on faster than light particles, tachyons. It seems to me the letter writers want to contest one basic point; which hits at the difference in attitude between the professional scientist and the non-professional. Causality is one of the most fruitful concepts in all science. Virtually every major problem requires that we make the assumption of causality—that is, the sort of paradox in which you can go back in time and shoot your grandfather doesn't arise—to get a meaningful solution at all. Now, this principle may not hold up forever, but it has worked very well so far. It is possible, of course, that causality only works locally—in our particular quiet corner of the universe, far away from dense objects. Also, violations of causality may be infrequent and hard to arrange, so that without exotic equipment we have not been able to find any. All of these things are quite reasonable objections to the point of view that David Book and I took. But, so far, these objections have been unfruitful.

It is impossible to prove the non-existence of things, but David and I were trying to show only the implausibility of tachyons. It seemed to us that if people were spending tens of thousands of dollars to do tachyon experiments, they should realize that they were attempting

experiments that would have vast implications if they panned out. Most scientists think causality is a rather rigid principle, and we felt they would reconsider tachyon experiments if they realized the overthrow of causality was necessary before they could get any concrete results. Of course, this paper of ours was just a reformulated version of Tolman's paradox. However, the proponents of tachyon theories had been advertising that Tolman's paradox was not a cogent argument against their work. We wanted to show that Tolman had not been circumvented.

However, as David said, our work probably did not stop the tachyon experiments by themselves. Rather, I think the lack of positive results eventually killed them. Much more bothersome to me has been the continued stream of theoretical papers on tachyons which show little or no knowledge of the causality paradoxes involved. That is, people continue to quantize the tachyon field, see how it theoretically interacts with other particles, etc., without noting that they have taken the overthrow of causality as a hidden assumption.

I think it would be quite profound if anyone ever found tachyons. Causality would have to be reconsidered and perhaps reformulated in a broader sense. This would be a significant intellectual revolution. But the rather dull-witted way tachyon experiments were done made me believe that the investigators didn't really understand what they were about.

GREGORY BENFORD  
Department of Physics  
University of California  
Irvine, California, 92664

Dear Mr. White,

This being my first letter to you I would like to open by thanking you for the many hours of entertaining and stimulating reading - I have derived from your fine mags, FANTASTIC and AMAZING. I like them so much that I'd rate FANTASTIC best of all sf mags, with AMAZING third, right after *F&SF*. From the beautiful covers to the excellent features (which are nearly as entertaining as the fiction itself) to the stories, you have put together two superb packages of science fiction. My only major criticism is the often mediocre, and sometimes downright poor, interior artwork. But even this is gradually improving.

In my mind, the main reason your mags are so much better than your competitors is because of the features. The letter columns and articles are always delightful, the book columns helpful, and best of all, the editorials thought provoking, informative, and usually well reasoned.

Which brings me to the point of this letter. I really must take exception to your editorial in the December AMAZING. While I wholeheartedly agree with you that President Nixon and his cohorts are morally bankrupt and are gradually destroying our freedoms, I must disagree with something you very strongly implied you are for, i.e., legalization of drugs.

It seems your only argument in favor of this is that if drugs were legalized, the price for them would go down and thus, the crime rate would drop as a result.

Surely you can see this is a ludicrous argument for the legalization of drugs, second only to the absurd reasons anti-life groups give for the legalization of abortion (which, as any thinking person can see, is nothing less than legalized murder).

I ask you: do you really want to risk the possible—in fact, highly probable—genetic damage drugs could wreak upon the human race? Surely it is too early to tell for certain whether any drug is safe, from marijuana to heroin. What's more, do you really want the majority of the populace stoned out of their skulls, off in a fantasy world, afraid to face reality? I, for one, do not relish the thought.

And, lest you think I'm an old right-winger extremist and a Catholic to boot, well, I'm not. Being that I'm 17 and spent hundreds of hours working for Senator McGovern last year can attest to that.

At any rate, may your mags continue to grow in quality, may they go monthly, and may they prosper for many years to come. As long as they're around, I'll continue to subscribe.

ROB CARSON  
51 East Reid Pl.  
Verona, N.J., 07044

*Narcotic drugs (heroin, etc.) do not themselves cause crime. But the fact of their illegality makes their possession a crime, and this in turn*

*makes their acquisition risky and expensive. The expense has motivated a great deal of crime. That this is not the only possible way to deal with such drugs has been demonstrated in other countries and cultures. Present methods for dealing with the "problem" here have only increased the profitability of such drugs for those who deal in them, and this in turn has lead to an increase in their traffic. This is surely not a valid solution. Nor is any solution which fails to differentiate between the effects of the actual drugs upon their users and the effects of the drugs' illegality upon their trade. There are a number of valid objections to narcotic use, but yours is not one of them. The opiates have not been shown—despite generations of use in other cultures—to cause genetic damage. Nor has marijuana (a non-narcotic, but a drug with a history of many centuries' use) or the psychedelics. Periodically the "genetic damage" bugaboo is hauled out, often by the sensationalistic press and occasionally by irresponsible medical "researchers" whose experiments are so sloppily conducted as to be worthless. However, if you are worried about genetic damage, I suggest you carefully avoid both coffee and tobacco, which (along with a number of other legal and commonly available substances) have been demonstrated to cause chromosome breakages. Whether these breakages actually cause "genetic damage" is still an open question, of course—most genetically damaged embryos spontaneously abort*

early in pregnancy.

*As for legalized abortion, I support it unhesitatingly. In most cases the abortion is a favor to the embryo; to be brought into this already overcrowded world as an unwanted child is no favor at all. (Further, the question of "where does life start" is one of false dichotomies. The potential for life is far greater—in terms of both unfertilized eggs, flushed away each menstrual period, and the multiplicity of sperm in seminal fluid—than its actualization in terms of healthy newborn infants.) The number of spontaneous early-term abortions—or "miscarriages"—is much higher than most people realize. Many women are unaware, in fact, of having been pregnant and treat the "mid-period staining" as a none-too-rare occurrence. I do not see abortion as "anti-life." This is a jingoistic tag. One might as easily, from the viewpoint of the women involved, their families, and society in general, term abortion as "pro-life" and the "right-to-life" position of anti-abortionists as cruel and anti-life. In either case, the term is falsely simplistic. —TW*

Dear Mr. White,

I have just returned from my first worldcon. It was rather disappointing. I attended the con expecting to meet people interested in many of the same things that I am. I'm sure there were many of these, but I didn't meet any. I spent most of my time alone.

I tried to discourage this state. I offered my help in various things. No one wanted it. I posted a notice

asking fans from my area to get in touch with me. No one answered it. This wasn't at all like the "family of fandom" I'd heard about and was expecting.

If all neofen are treated as I was, it's a wonder fandom still exists. If not, what did I do wrong? (I assure you, I do not now have, nor have I ever had leprosy.)

I now hold a supporting membership in Discon II. I'm not sure I want to convert it to an attending membership. However, if someone can convince me, (and it won't take much,) I'll gladly put my two dollars in the mail.

LEAH A. ZELDES

21961 Parklawn

Oak Park, Michigan 48237

*Not having a log of your activities at the Torcon, I can't tell you what you did wrong. I can say that I'm surprised you had so much difficulty meeting people—with close to three thousand fellow sf fans in attendance. Perhaps you simply never seized the initiative and opened a conversation with anyone. Perhaps you passed up the many well-advertised open parties during the evening hours. Perhaps you never stumbled upon the National Fantasy Fan Federation room (a lounge on one of the convention floors) where newcomers are traditionally made to feel welcome. Certainly the bulletin board was overloaded with notices of various sorts, and it's possible yours was overlooked by fans from your area. But did you read any of the others? One or more might have directed you to precisely the activity you*

wanted. The "family of fandom" is a state of mind, an attitude on the part of the family's members. Did you go into the All Our Yesterdays room? Prepared by Susan Glicksohn, it offered a series of exhibits which explained the history and purpose of fandom, and at almost all times Susan and other fans were there to talk to anyone who was interested and had questions to ask. But basically how you are "treated" is up to you. Remember—we all went to our first convention at some point. —TW

Dear Mr. White:

I have a comment to make about Stanley Schriefer's hilariously stupid letters.

It seems that Mr. Schriefer is not very attentive as he reads. He gives the impression that *Lost Worlds of 2001* is a novel. It is *not*! Instead, it is an account of the making of the well-known book and movie. Although almost all of the book (with the exceptions of the story 'The Sentinel' and an essay titled 'Son of Dr. Strangelove' which started the whole book) was previously unpublished, the fictional portions were written in 1965 and 66, a fact which Mr. Schriefer doesn't mention. It *could* mean that he didn't read it at all.

Here is some advice, Mr. Schriefer: I bet you look silly writing letters while you have your foot in your mouth. Don't do it any more. I'd much prefer reading the "truth" about Deros or quotations from Velikovsky's *Worlds in Collision* to your drivel.

ALAN L. BOSTICK  
c/o Hawaii prep. acad.  
Kamuela, HI.96743

Dear Mr. White,

I have read the proposed Worldcon reform suggestions by Mz Dodd in her letter in the Oct. AMAZING with interest, a certain amount of amusement, and some dismay. No doubt (I hope) in offering her five points, she has the convention's best interests at heart, although I strongly suspect some of her concern is due to her fears of being just another face in the crowd, but I am not so sure her suggestions would contribute to or insure the continuing survival of the convention in the years to come.

Her points and my impressions:

1. "A committee of authors, prozine editors, and fanzine editors should be set up to coordinate Worldcon reforms."

First off, I assume this committee—besides deciding what reforms to initiate—would also be the permanent international science fiction organization entrusted with organizing future Worldcons that she speaks of in the first part of her letter. I've always been a tad suspicious of so-called incumbents. To trust the "party in power" to act as its own regulatory agency is a little like trusting the wolf to guard the sheep (nee Watergate). I'm not for a minute suggesting that the aforementioned proposed committee members would necessarily be dishonest, but who would believe that, in such a permanent organization responsible for promoting and preparing an annual venture such as

the convention, politics would not play a major part? Where as the authors and prozine editors may be eminently qualified in light of their profession does not necessarily mean they should be employed. Nor the fanzine editors just because of their hobby. For example, those who print a "personalzine" type of fanzine—should so-and-so's monthly reports of his harrowing adventures in the jungle of Fandom be the only prerequisite for responsibility when thousands of dollars and the success of the convention are concerned just because his stock is good and his circulation is large? The man could be an utter incompetent! Hell, I could qualify by merely xeroxing off a few hundred sheets whose first line would state that the editor of AMAZING was incapable of distinguishing science fiction from recipes and then continue on for pages about my love life (or lack of) with a nubile young femmefan! (By the way, no slur intended towards fanzines.) Before anyone states the obvious about this extreme, let me ask Mz Dodd, "Who is going to appoint the committee?" Naturally another committee (s), which runs into further problems.

2. "Those readers and fans who have had published letters and articles about science fiction in newspapers, prozines, and fanzines should be given *first* consideration of *attending* Worldcon memberships." (Italics hers) This proposal especially rankles me. For the last fifteen years sf has composed over 95% of the fiction I consume and in excess of 50% of

my total reading diet; why should I be relegated to the role of a second class citizen just because I haven't taken an active part in fandom or had anything printed (the number of rejection slips in my bottom drawer ought to account for something other than my present lack of literary skills)? Perhaps by sf definition I am not a fan, but according to *Webster's New World Dictionary of the American Language* (an authority I deem a higher order than sf fandom) a fan is "a person enthusiastic about a specified sport, pastime, or performer; . . ." It says nothing about writing letters or attending conventions and such. It would be greatly appreciated if someone will tell me why I am not a fan but only a reader who is only good for helping defray the costs of the major prozines. This proposal smacks of elitism. Her methods for determining eligibility are laughable at best; the next things you know she'll have us taking tests similar to college entrance examinations, and when that doesn't keep the numbers down she'll be instituting the grandfather clause.

3. "All . . . remaining *attending* memberships should be on a first come first serve basis, with a deadline date terminating application for membership." (Italic hers)

The first part of this point stands or falls with proposal #2. I'm truly amazed that no screening process would be employed to keep undesirables from picking up the leavings. (Every convention should have its token "readers" to point



out and patronize.) The "... first come first serve basis ..." is already in affect and has been ever since fandom decided to legitimize its annual gathering.

4. "All readers and fans may vote for the 'Hugo' awards by paying the supporting membership fee, but *only* those who have a special membership card may be admitted at the convention." (Italics hers. I'm surprised she didn't italicize "special")

I believe—correct me if I'm wrong—past conventions have been structured this way; a few extra dollars in the envelope entitles you to rub shoulders with your favorites. (I will give Mz Dodd the benefit of the doubt and assume by the word "supporting" she means less expensive than "attending".) If this is true, it hardly needed restating.

5. "The above mentioned Worldcon committee should take a poll with the aid of prozine and fanzine editors to determine a reasonable figure that would be the cut off point for *attending* memberships." (Italics hers)

From what I've read in your editorials, Ted, the convention does seem to be growing too large for its britches, but I don't particularly like the idea of a few arbitrary rules deciding who can and who can't attend. It has always been my impression—and once again correct me if I'm wrong—that the convention's purpose was, as Mz Dodd says, a "meaningful experience" for anyone with a deep, abiding love of science fiction and not an exclusive country club type

affair where the riffraff are to be kept from soiling the carpets and bothering the blue-blooded members of science fiction.

Are limits or quotas really necessary? The way things are going, the number of people attending will be inversely proportional to the costs, hence the convention by the directives of inflation will become self-limiting. If Mz Dodd is so worried about the sheer mass of humanity, then perhaps the way to restrict the attendance would be to hold a Worldcon in two separate localities simultaneously—this I realize would tend to screw up the awards ceremony and limit the numbers of pros to be confronted. This way travel costs for the individuals could be held to a minimum.

A novel idea of my own would be a convention in the Woodstock vein. The money that normally goes towards convention halls or hotels, which also requires renewing every year, could be used to purchase several large tents for the lectures, meetings, ceremonies, and official parties. This equipment could be used for years to come. Everyone else would be required to bring along their own camping equipment. Both convention and individual expenses would be low, and the entire affair could possibly be more fun than it ever has.

Anyway, had the lady's suggestions been used several years ago I and a friend (another "reader") would have been ineligible to attend Baycon II. Although we tended to think the participants leaned towards the clannish side (that may



be largely due to our own inherent shyness at the time and not so much snobbery on their part) we enjoyed ourselves immensely and doubled our interest in sf at the same time. I have never been able to participate in one since then, partly because of lack of funds, distance to be traveled, and a free, all expense paid four year vacation in Tricky Dick's boys in blue (and I don't mean the U.S. Cavalry). Someday, should favorable circumstances arise, I'll sally forth to another Worldcon. (After all, if this letter is deemed fit to print, I shall be qualified under the Dodd Rules of Admission, right?)

In closing, let me say that you have done an excellent job with these two magazines, Ted, and I hope you, Mz Dodd, find your meaningful experience at the Torcon 2, but not at someone else's exclusion.

VAN A. HODGKIN  
10437 Malaga Way  
Rancho Cordova, Calif. 95670

*While I have suggested that one*

*way to keep the Worldcon at a manageable size would be to limit attendance, I agree with you that the methods suggested by Sandra Dodd would probably be both unfair and unworkable. The only practical form of limitation I am aware of is that of restricting publicity. Or, at least, restricting publicity to science fiction publications—as opposed to advance local newspaper and television coverage. We did that in 1967, made a few enemies in the process (one of whom groused about us on his radio program) and still broke all attendance records for the time. The “Woodstock” proposal was mentioned in these pages a while back by Amos Salmonson, and has found favor in some corners of fandom. But I suspect it will be tried first by an independant convention (there are many regional conventions in addition to the Worldcon) before a Worldcon adopts it. In the meantime, travelling distance may be another effective limiting factor—for 1975 the Worldcon will be in Melbourne, Australia! —TW*

The Club House (continued from page 107)

Rating . . . 4

PREHENSILE #9 (Mike Glycer, 14974 Osceola St., Sylmar, CA 91342; irregular, mimeo; unnumbered pp., 50, May, 1973.)

Rating . . . 5½

WHISPERS #1 (Stuart David Schiff, 5508 Dodge Drive, Fayetteville, N.C. 28303; quarterly, offset; 64 pp., \$1.50, 4/\$5.50. July, 1973.)

Rating . . . 6½

SIRRUISH #11 (Railee Bothman, 1300 W. Adams, Kirkwood, Mo. 63122; irregular, offset; 44 pp., 50, June, 1973.)

Rating . . . 6

THE ANYTHING THING #6 (Frank Balazs and Matthew Schneck, 19 High St., Croton-on-Hudson, NY 10520; irregular, mimeo; unnumbered pp., 40, July, 1973.)

Rating . . . 4

FANTASIAE (Fantasy Association, P.O. Box 24560, Los Angeles, CA 90024; monthly, offset; 10, 10, 12, 12, 12 pp., respectively, 12/\$3.00. April-August, 1973) The newsletter of the Fantasy Association. Some interesting reprinted articles by fantasy writers about fantasy, plus some news and reviews.

Rating . . . 6

129

# CLASSIFIED ADVERTISEMENTS

**RATES AND TERMS:** Science Fiction Adventure Group consists of 4 books... Amazing, Fantastic, Thrilling Science Fiction and Science Fiction Adventure Classics. Space can only be bought on GROUP BASIS at the rate of \$1.00 per word... (including name and address). Minimum order of \$10.00 (10 words). Payment must accompany copy except when ads are placed by accredited Advertising agency. Frequency discount: 5% for 6 months. 10% for 12 months paid in advance.

**GENERAL INFORMATION:** First word in all ads set in bold caps at no extra charge. Additional words may be set in bold caps at 5¢ extra per word. All copy subject to publisher's approval. Closing Date: 1st of the 3rd preceding month (for example, April issue closes January 1st). Send order and remittance to: Print Advertising Rep., Inc., 16 West 48th St., New York, N.Y. 10036.

## BOOKS

"USP—A Physics for Flying Saucers" \$6.00 USP. Press Box 137, Del Mar, Calif. 92014.

THE GLITTERING PLAIN by WILLIAM MORRIS. Forgotten Fantasy novel reprinted in quality paperback edition. Only \$2.45 from: Sunset-Vine Bookmart, 1521 N. Vine, Hollywood, California 90028.

TIME TRANSPORT A REALITY. "Found on the elevator, 205 W. 57th St.", a recording from the distant future. High quality 33 1/3 rpm ten-inch disc. \$3.00 to The Record, Box 3011, New York, N.Y. 10008.

## OLD RARE BOOKS

OLD RARE REPRINTED BOOKS ON ASTROLOGY, HERBS, NUMEROLOGY, PALMISTRY, OCCULTISM. CATALOG 50¢. MARSHALL, P.O. BOX 7169P, BALTIMORE, MARYLAND 21218.

## BOOKS & MAGAZINES

100 page catalog Arkham Fantasy Burroughs, Mirage Press Science Fiction pulp, paperbacks, comics. Send 75¢ Passaic Book Center, 594 Main Avenue, Passaic, N.J. 07055.

NAME the book—we'll find it for you! Out of print book specialists. All subjects. (Title alone is sufficient.) Write—no obligation, Books-On-File, Dept. AMF, Union City, N.J. 07087.

THE TREE The weirdest tree in the world. Plus fifteen other stories in diabolical, unnatural fantasy. \$1.50 Psychic P.O. Box 146, Camino, Calif. 95709.

FRANKENSTEIN Interview. "Monster" Tells All. \$1.50. Norris, Postbox 44377-L, Indianapolis, 46244.

WANTED TO BUY—All issues of science fiction and fantasy magazines from 1926 to date. Please let me hear from you. Harry Bennett, 6763 Hollywood Blvd., Los Angeles, Calif. 90028.

LOGIC NEWSLETTER, LOGIC DESIGN AND CONSTRUCTIONS, SAMPLE COPY \$1.00. LOGIC NEWSLETTER, POB 252, WALDWICK, N.J. 07463.

SELLING COMIC BOOKS, PULPS (AMAZING, SHADOW, DOC SAVAGE, ETC.), MAGAZINES, PLAYBOYS, GIVEAWAYS, MOVIE MERCHANDISE, ETC. 1900-1974. CATALOGUES 75¢. ROGOFSKY BOX AF1102, FLUSHING, NEW YORK 11354.

LOVECRAFT! New Discovery! 25,000 unpublished Lovecraft words! "LOVECRAFT AT LAST" . . . 65,000 word book by H.P. Lovecraft and Willis Conover . . . HPL's LAST MONTHS. IN HIS OWN WORDS! Hardcover! deluxe edition, illustrated, indexed. "Powerful"—Faig . . . "Wonderful!"—Merritt . . . "Most important!"—Schiff . . . "Irresistibly informative! Far exceeded expectations! Profoundly moving!"—Ryan. SAVE NOW: limited prepublication, \$12.50. (Maximum 2, this price.) FREE PREMIUM—facsimile Lovecraft manuscript! Two-week moneyback guarantee. Carrollton Clark, 9122 Rosslyn (AFTS), Arlington, Virginia 22209.

## CARD READINGS—MAILED

Individually Prepared. Ancient Method. Shuffle 52 playing cards. Send List First. 20 cards self-addressed, stamped envelope; \$3.00, LADY LOUISE D9 Box 4-1312, Anchorage, Ak. 99509 (Use 11¢ Airmail Postage).

## BUSINESS OPPORTUNITIES

Mailorder Importing Business fantastic Directory \$3.00 HETTICK Lockbox 1495, Bismarck, N. Dak. 58501.

## EARTH RELIGION SUPPLIES

COMPLETE Witchcraft Supplies. Warlock Shop, 300 Henry Street, Brooklyn, New York 11201. Catalogue 50¢.

## MISCELLANEOUS

LOCKED-OUT PICK-A-LOCK TOOLKIT HELPER \$1.95 WAGAR'S, 162 CLOVER DRIVE, UPPER LAKE, CALIF. 95485.

## PERSONALS

LONELY? UNLUCKY? TROUBLED? QUESTIONS ANSWERED AND HAPPINESS COURSE \$2.00 ORACLE, BOX 324, ONTARIO, CALIF. 91761.

## EDUCATIONAL OPPORTUNITIES

ACUPUNCTURE TRAINING Home Study Course! Ying, Box 219W, Toronto, Canada, M6M 4Z2.

AN ATHLETIC

# CHAMPION BODY

STRENGTH - ENDURANCE - RESILIENCE -

ROTATION-POWER MAKES YOUR MUSCLES

▶▶ GROW

IN 67 EXCITING DAYS....!

**YOUR NEGLECTED MUSCLES ARE IN FOR THE SURPRISE OF YOUR LIFE.**

Your blood vessels will widen and will carry more blood. Your joints will enjoy being "greased" again. All inner organs will receive fresh impulses. Your Circulatory System will carry more of the vitally important build-up elements to your muscles. Inactive parts of your lungs will be filled with air. Your chest will widen by 5 - 8 inches. Arms and legs will develop an athletic shape as never before. Flabby fat vanishes inch by inch, including the least desired one on your belly. A new exerciser, the DYNOTRAINER enables everybody to train sensibly, i.e. it will adapt itself automatically to your condition and to your age.

**WE'LL SHOW YOU HOW TO DO IT RIGHT! DON'T GO THE WRONG WAY!**

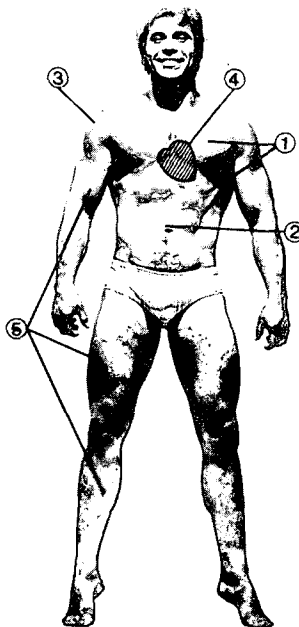
➡ 1) a **FLAT CHEST** won't simply disappear because you are jogging or walking. Only a targeted development of the **PECTORALS** (chest) and **SERRATUS MAGNUS** (side chest) muscles will achieve this. The DYNOTRAINER will do not only this, but simultaneously also add another 1/3 gallon of air-volume to your lungs, which, in turn, will improve your **ENDURANCE** considerably.

➡ 2) an uncomfortable **MIDRIF** won't go away with swimming or doing kneebends. Probably it will be in the way there! But the DYNOTRAINER will alternately work your stomach muscles hard, it will knead and pummel and massage them, and reach even deep into the digestive tract. No flabby fat can survive such treatment!

➡ 3) no **DROOPING SHOULDERS** or **ROUND BACKS** can be corrected by doing the skip-rope or by playing hockey. Only the targeted build-up of the **DELTOID** (shoulders), the **LATISSIMUS DORSI** (back) and the **TRAPEZIUS** (upper back and neck) will give you the much desired V-shape. The DYNOTRAINER will do just that!

➡ 4) many sportsmen may unwittingly abuse their hearts (which is a muscle in itself, as you well know) and circulation. The DYNOTRAINER with its automatic adaptation to your condition will permit just that much exertion of your power as will be beneficial to your limitations given by age. It is the best way to prevent heart trouble!

➡ 5) **POWERFUL LEGS** and **ARMS** can not be achieved by calisthenics alone. Only the DYNOTRAINER will give those growth impulses automatically, which are so necessary for the build-up of your muscles. You can rest assured that they will grab whatever they can get!



**WE'LL LET YOU SHARE THESE SECRETS. FREE!**

You'll find 42 tips and know-hows in our  
**FREE GIANT COLOR BROCHURE**

which is yours for the asking. It will tell you everything that is necessary to build an athletic and healthy body. We don't only say "go and exercise" and then leave you alone to do as you know (or don't). We'll show you exactly what you will have to do in your case, in order to achieve the best results, always considering YOUR condition and YOUR age. We'll be happy to send you our SUPER-BROCHURE free and without any obligation. Simply fill in the coupon below, or write us a postcard and you'll receive our wonderful COLOR-BROCHURE by return mail. Thanks for printing your name and address clearly.

**THOYLO CORP. Dept. 236 64 Palisade Ave., GARFIELD, N. J. 07026**

LICENSED TO UNZ.ORG  
ELECTRONIC REPRODUCTION PROHIBITED

# LA SALLE EXTENSION UNIVERSITY

A Correspondence Institution • 417 S. Dearborn Street, Dept. 49-020, Chicago, Illinois 60605

Please rush me, without cost or obligation, FREE booklet and full information on the field I have checked below:

## ACCOUNTING

- ☐ Complete Accounting  
☐ Income Tax  
☐ CPA Training  
☐ Bookkeeping

## BUSINESS MANAGEMENT

- ☐ Management Training

## REAL ESTATE

- ☐ Complete Real Estate  
☐ Real Estate Brokerage

## STENOTYPE

- ☐ Machine Shorthand

## TRAFFIC & TRANSPORTATION

- ☐ Complete Training

## AUTOMOTIVE MECHANICS

- ☐ Basic Training

## ELECTRONICS TECHNICIAN

- ☐ Basic Training

## DIESEL MECHANICS

- ☐ Basic Training

## DRAFTING

- ☐ Complete Training

## COMPUTER PROGRAMMING

- ☐ Basic Training

## LANGUAGE INSTRUCTION

- ☐ French ☐ Spanish

## DENTAL OFFICE ASSISTANT

- ☐ Complete Training

## ART TRAINING

- ☐ Complete Training

## SECRETARIAL

- ☐ Complete Training

## AIR CONDITIONING & REFRIGERATION

- ☐ Basic Training

## INTERIOR DECORATING

- ☐ Complete Training

## LAW COURSES

- ☐ Business Law  
☐ Claim Adjusting Law  
☐ Law for Police Officers  
No state accepts any law home study course, including LaSalle's, as sufficient education to qualify for admission to practice law.

## MOTEL/HOTEL MANAGEMENT

- ☐ Motel Management  
☐ Hotel Management

## RESTAURANT MANAGEMENT

- ☐ Management Training

## WRITING

- ☐ Non-Fiction ☐ Fiction

## MUSIC INSTRUCTION

- ☐ Piano ☐ Guitar ☐ Other

## HIGH SCHOOL

- ☐ Diploma Program

Mr.

Mrs.

Miss

(Circle title and please print)

Age

Address

Apt. No.

City & State

Zip

If you had mailed this coupon a year ago, perhaps your salary would be up too!



## WHY NOT MAIL IT TODAY?

Look at these pleased reports from LaSalle students. Many success stories of this kind come to us every year — from people who began their career planning by mailing the LaSalle coupon for information.


Yes, many graduates attribute their increases in income largely to their LaSalle spare-time training.

LaSalle students have one ambition in common — to get out of the ranks of the untrained and earn more money and respect in a better job. Isn't that your goal too?

Without interfering with your present work — and by devoting only a little of your spare time — you too can prepare for advancement in the field of your choice through LaSalle home study. The cost is low.

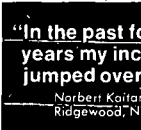
LaSalle has been a leader in home education for more than sixty years, enrolling over 2,000,000 ambitious men and women in its many courses. You study under the supervision of LaSalle's experienced faculty. Upon satisfactory completion of your study, you will receive the LaSalle diploma — a respected credential.

Check the subject you are interested in — then send the coupon above for FREE booklet. No obligation.




"Since enrolling with LaSalle my salary has doubled."

Robert Kubeck  
St. Cloud, Minnesota.



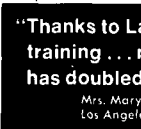
"In the past four years my income has jumped over \$9,000."

Norbert Kallan  
Ridgewood, N.Y.



"My salary has quadrupled since starting the course."

George R. Kelly  
W. Bridgewater, Mass.



"Thanks to LaSalle training... my salary has doubled."

Mrs. Mary M. Nyberg  
Los Angeles, Calif.

# LA SALLE EXTENSION UNIVERSITY

A Correspondence Institution • 417 S. Dearborn Street, Chicago, Illinois 60605

LICENSED TO UNZ.ORG  
ELECTRONIC REPRODUCTION PROHIBITED